SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.__)

Filed by the Registrant $extsf{ extsf{ iny line integral}}$

Filed by a Party other than the Registrant \Box

Check the appropriate box:

- □ Preliminary Proxy Statement
- □ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- ☑ Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material Pursuant to § 240.14a-12

CELLADON CORPORATION

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box)

- ☑ No fee required.
- □ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - 1. Title of each class of securities to which transaction applies:
 - 2. Aggregate number of securities to which transaction applies:
 - **3.** Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):
 - 4. Proposed maximum aggregate value of transaction:

5. Total fee paid:

- $\hfill\square$ Fee paid previously with preliminary materials.
- □ Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

6. Amount Previously Paid:

- 7. Form, Schedule or Registration Statement No.:
- 8. Filing Party:

9. Date Filed:

CELLADON CORPORATION

11988 El Camino Real, Suite 650 San Diego, California 92130

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 4, 2015

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of Celladon Corporation, a Delaware corporation (the "Company"). The meeting will be held on Thursday, June 4, 2015 at 9:00 a.m. local time at the offices of Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121 for the following purposes:

- 1. To elect one Class II director named herein to hold office until the 2018 Annual Meeting of Stockholders.
- 2. To ratify the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2015.
- 3. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the Proxy Statement accompanying this notice.

The record date for the annual meeting is April 15, 2015. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

Important Notice Regarding the Availability of Proxy Materials for the Stockholders' Meeting to Be Held on June 4, 2015 at 9:00 a.m. local time at the offices of Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121.

The proxy statement and annual report to stockholders are available at www.celladon.com.

By Order of the Board of Directors

/s/ Elizabeth E. Reed Secretary

San Diego, California April 30, 2015

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the enclosed proxy, or vote over the telephone or the internet as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. A return envelope (which is postage prepaid if mailed in the United States) has been provided for your convenience. Even if you have voted by proxy, you may still vote in person if you attend the meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

CELLADON CORPORATION

11988 El Camino Real, Suite 650 San Diego, California 92130

PROXY STATEMENT FOR THE 2015 ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 4, 2015

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why am I receiving these materials?

We have sent you these proxy materials because the Board of Directors (sometimes referred to as the "Board") of Celladon Corporation (sometimes referred to as the "Company" or "Celladon") is soliciting your proxy to vote at the 2015 Annual Meeting of Stockholders, including at any adjournments or postponements of the meeting. You are invited to attend the annual meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card, or follow the instructions below to submit your proxy over the telephone or through the internet.

We intend to mail these proxy materials on or about May 6, 2015 to all stockholders of record entitled to vote at the annual meeting.

How do I attend the annual meeting?

The meeting will be held on Thursday, June 4, 2015 at 9:00 a.m. local time at the offices of Cooley LLP, 4401 Eastgate Mall, San Diego, California 92121. Directions to the annual meeting may be found at:

 $https://maps.google.com/maps?f=q&source=s_q\&hl=en&geocode=\&q=4401+Eastgate+Mall,+San+Diego,+CA+92121-1909.$

Information on how to vote in person at the annual meeting is discussed below.

Who can vote at the annual meeting?

Only stockholders of record at the close of business on April 15, 2015 will be entitled to vote at the annual meeting. On this record date, there were 23,905,833 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on April 15, 2015 your shares were registered directly in your name with Celladon's transfer agent, American Stock Transfer & Trust Company, LLC, then you are a stockholder of record. As a stockholder of record, you may vote in person at the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to fill out and return the enclosed proxy card or vote by proxy over the telephone or on the internet as instructed below to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on April 15, 2015 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and these proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the annual meeting. As a beneficial owner,

you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the annual meeting. However, since you are not the stockholder of record, you may not vote your shares in person at the meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are two matters scheduled for a vote:

- Proposal 1: Election of the one Class II director named herein to hold office until the 2018 Annual Meeting of Stockholders; and
- Proposal 2: Ratification of the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2015.

What if another matter is properly brought before the meeting?

The Board of Directors knows of no other matters that will be presented for consideration at the annual meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. For each of the other matters to be voted on, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are as follows:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote in person at the annual meeting or vote by proxy using the enclosed proxy card, vote by proxy over the telephone, or vote by proxy through the internet. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote in person even if you have already voted by proxy.

- To vote in person, come to the annual meeting and we will give you a ballot when you arrive.
- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the annual meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-PROXIES (1-800-776-9437) if calling from the United States or 1-718-921-8500 if calling from a foreign country using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your telephone vote must be received by 11:59 p.m., Eastern Time on June 3, 2015 to be counted.
- To vote through the internet, go to http://www.voteproxy.com to complete an electronic proxy card. You will be asked to provide the company number and control number from the enclosed proxy card. Your internet vote must be received by 11:59 p.m. Eastern Time on June 3, 2015 to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a voting instruction form with these proxy materials from that organization rather than from

Celladon. Simply complete and mail the voting instruction form to ensure that your vote is counted. Alternatively, you may vote by telephone or over the internet as instructed by your broker or bank. To vote in person at the annual meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

Internet proxy voting may be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of April 15, 2015.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote by completing your proxy card, by telephone, through the internet or in person at the annual meeting, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the particular proposal is considered to be a routine matter under applicable rules. Brokers and nominees can use their discretion to vote uninstructed shares with respect to matters that are considered to be routine under applicable rules, but not with respect to non-routine matters. Under applicable rules and interpretations, non-routine matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. Accordingly, your broker or nominee may not vote your shares on Proposal 1, without your instructions, but may vote your shares on Proposal 2.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the election of the nominee for director, "For" the ratification of the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2015. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

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 shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the proxy cards in the proxy materials to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may submit another properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the internet.
- You may send a timely written notice that you are revoking your proxy to Celladon's Secretary at 11988 El Camino Real, Suite 650, San Diego, California 92130.
- You may attend the annual meeting and submit a ballot in person. Simply attending the meeting will not, by itself, revoke your proxy.

Your most current proxy card or telephone or internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

When are stockholder proposals and director nominations due for next year's annual meeting?

To be considered for inclusion in the Company's proxy materials for next year's annual meeting, your proposal must be submitted in writing by January 7, 2016, to the attention of the Secretary of Celladon Corporation, 11988 El Camino Real, Suite 650, San Diego, California 92130. If you wish to submit a proposal (including a director nomination) at the meeting that is not to be included in the Company's proxy materials for next year's annual meeting, you must do so between February 5, 2016 and March 6, 2016. You are also advised to review the Company's Bylaws, which contain additional requirements relating to advance notice of stockholder proposals and director nominations.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect a Class II director, votes "For," "Withhold" and broker non-votes; and, for the proposal to ratify the Audit Committee's selection of Ernst & Young LLP as our independent public accounting firm, votes "For" and "Against," abstentions and, if applicable, broker non-votes. Abstentions will be counted towards the vote total for Proposal 2 and will have the same effect as "Against" votes. Broker non-votes will be counted towards the presence of a quorum but will not be counted towards the vote total for any proposal.

What are "broker non-votes"?

When a beneficial owner of shares held in "street name" does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed to be non-routine under applicable rules, the broker or nominee cannot vote the shares. These unvoted shares are counted as "broker non-votes."

How many votes are needed to approve each proposal?

- For the election of a Class II director, the nominee receiving the most "For" votes from the holders of shares present in person or represented by proxy and entitled to vote on the election of directors will be elected. Only votes "For" or "Withheld" will affect the outcome.
- To be approved, Proposal 2, the ratification of the selection of Ernst & Young LLP as the Company's independent registered public accounting firm for its fiscal year ending December 31, 2015, must receive "For" votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote on the matter. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes, if any, will have no effect.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present at the meeting in person or represented by proxy. On the record date, there were 23,905,833 shares outstanding and entitled to vote. Thus, the holders of 11,952,917 shares must be present in person or represented by proxy at the meeting to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you submit a ballot in person at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting in person or represented by proxy may adjourn the meeting to another date.

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 additional Form 8-K to publish the final results.

What proxy materials are available on the internet?

The proxy statement, Form 10-K and annual report to stockholders are available at www.celladon.com.

PROPOSAL 1

ELECTION OF DIRECTORS

Celladon's Board of Directors is divided into three classes. Subject to changes that may result from resignations and term expirations, each class generally consists, as nearly as possible, of one-third of the total number of directors, and each class has a three-year term. Vacancies on the Board may be filled only by persons elected by a majority of the remaining directors. A director elected by the Board to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director's successor is duly elected and qualified.

The Board of Directors presently has seven members. There are two Class II directors whose term of office expires in 2015: Michael Narachi, and Joshua Funder, M.D. Mr. Narachi has been nominated for reelection at the annual meeting, and we would like to thank Dr. Funder for his service to Celladon as he will not continue to serve as a director following the annual meeting. The Board of Directors intends to approve a reduction in the authorized size of our Board of Directors from seven directors to six directors, to be effective on or about the date of the annual meeting. Proxies may not be voted for a greater number of persons than the number of nominees named in this proxy statement. Mr. Narachi, a current director of the Company, was appointed as a director upon recommendation of the Nominating and Corporate Governance Committee of the Board of Directors and has been recommended for nomination to the Company's Board of Directors at the annual meeting by the Nominating and Corporate Governance Committee. If elected at the annual meeting, Mr. Narachi will serve until the 2018 annual meeting and until his successor has been duly elected and qualified, or, if sooner, until the director's death, resignation or removal. It is the Company's policy to invite directors and nominees for director to attend the annual meeting.

Directors are elected by a plurality of the votes of the holders of shares present in person or represented by proxy and entitled to vote on the election of directors. Accordingly, the nominee receiving the highest number of affirmative votes will be elected. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the nominee named below. If the nominee becomes unavailable for election as a result of an unexpected occurrence, shares that would have been voted for that nominee will instead will be voted for the election of a substitute nominee proposed by Celladon. The person nominated for election has agreed to serve if elected. The Company's management has no reason to believe that the nominee will be unable to serve.

NOMINEES

The Nominating and Corporate Governance Committee seeks to assemble a board that, as a whole, possesses the appropriate balance of professional and industry knowledge, financial expertise and high-level management experience necessary to oversee and direct the Company's business. To that end, the Nominating and Corporate Governance Committee has identified and evaluated nominees in the broader context of the Board's overall composition, with the goal of recruiting members who complement and strengthen the skills of other members and who also exhibit integrity, collegiality, sound business judgment and other qualities that the Nominating and Corporate Governance Committee views as critical to effective functioning of the Board. The brief biographies below include information, as of the date of this proxy statement, regarding the specific and particular experience, qualifications, attributes or skills of each director or nominee that led the Nominating and Corporate Governance Committee to believe that that nominee should continue to serve on the Board. However, each of the members of the Nominating and Corporate Governance Committee may have a variety of reasons why he believes a particular person would be an appropriate nominee for the Board, and these views may differ from the views of other members.

Nominee for Election for a Three-year Term Expiring at the 2018 Annual Meeting

Michael Narachi, 55, has served as our Chairman of the Board of Directors since October 2013. Since March 2009, Mr. Narachi has served as the President and Chief Executive Officer and a member of the Board of

Directors of Orexigen Therapeutics, Inc., a biopharmaceutical company focused on the treatment of obesity. Previously, Mr. Narachi served as Chairman, Chief Executive Officer and President of Ren Pharmaceuticals, Inc., a private biotechnology company, from November 2006 to March 2009. From August 2002 to January 2008, Mr. Narachi served as Chairman of the Board of Directors of Naryx Pharma, Inc., a private pharmaceutical company. In 2004, Mr. Narachi retired as an officer and Vice President of Amgen Inc., a leading therapeutics company, where he served as General Manager of Amgen's Anemia Business from 1999 to 2003. Mr. Narachi joined Amgen in 1984 and held various positions throughout the organization including: Product Development Team Leader for NEUPOGEN; Director of Clinical Operations in Thousand Oaks, California and Cambridge, UK; Vice President of Development and Representative Director for Amgen Japan; Head of Corporate Strategic Planning; Chief Operations Officer of Amgen BioPharma; and Vice President, Licensing and Business Development. He currently serves on the Board of Directors of AMAG Pharmaceutical, Inc., a biotechnology company. Mr. Narachi also serves on the Board of Directors of AMAG Pharmaceuticals, Inc., a specialty pharmaceutical company. Mr. Narachi also serves on the Board of Directors of the Pharmaceutical Research and Manufacturers of America and the Biotechnology Industry Organization. Mr. Narachi received a B.S. in Biology and an M.A. in Biology and Genetics from the University of California at Davis. He received an M.B.A. from the Anderson Graduate School of Management at University of California, Los Angeles. Our Nominating and Corporate Governance Committee believes that Mr. Narachi's business, leadership and management experience, as well as his experience in the biotechnology industry, qualifies him to serve on our Board of Directors.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE NAMED NOMINEE

Directors Continuing in Office Until the 2016 Annual Meeting

Gregg Alton, 49, has served on our Board of Directors since August 2013. Since August 2009, Mr. Alton has served as executive vice president of corporate and medical affairs and chief compliance officer at Gilead Sciences. In this role, Mr. Alton oversees legal affairs, public affairs, government affairs, emerging markets and medical affairs. From January 2008 to March 2013, Mr. Alton served as a director of Oculus Innovative Sciences, Inc., a global healthcare company. From March 2000 to August 2009, Mr. Alton served as general counsel at Gilead and from October 1999 to March 2000, served as associate general counsel at the same company. Mr. Alton was a corporate attorney at the law firm of Cooley Godward LLP (now Cooley LLP) from November 1993 to December 1996 and from July 1998 to October 1999, and at the law firm Mintz Levin Cohn Ferris Glovsky and Popeo, P.C. from January 1997 to July 1998. Mr. Alton received a B.A. from the University of California, Berkeley and a J.D. from Stanford Law School. Our Nominating and Corporate Governance Committee believes that Mr. Alton's expertise and experience in the biotechnology industry qualifies him to serve on our Board of Directors.

Graham Cooper, 45, has served on our Board of Directors since September 2013. Since February 2013, Mr. Cooper has served as chief financial officer at Receptos, Inc., a publicly held biopharmaceutical company focused on therapeutics for immune disorders. From January 2012 to December 2012, Mr. Cooper served as chief financial officer at Geron Corporation, a biopharmaceutical company focused on cancer therapies. From May 2006 to March 2011, Mr. Cooper served as chief financial officer of Orexigen Therapeutics, Inc., a biotechnology company focused on obesity therapeutics. From 1999 to 2006, Mr. Cooper held positions of increasing responsibility, including director, health care investment banking, at Deutsche Bank Securities, a leading global investment bank, where he was responsible for executing and managing a wide variety of financing and merger and acquisition transactions in the life sciences field. From August 1992 to January 1995, Mr. Cooper worked as an accountant at Deloitte & Touche LLP, an independent registered public accounting firm, and was previously a C.P.A. Mr. Cooper holds a B.A. in economics from the University of California, Berkeley and an M.B.A. from the Stanford Graduate School of Business. Our Nominating and Corporate Governance Committee believes that Mr. Cooper's expertise and experience in the biotechnology industry and his financial expertise qualifies him to serve on our Board of Directors.

Krisztina M. Zsebo, Ph.D., 59, has served as our Chief Executive Officer and a member of our Board of Directors since 2004, and served as our President from 2004 until June 2014. From March 2004 until October 2007, Dr. Zsebo was a venture partner at Enterprise Partners Venture Capital, a venture capital firm. Prior to joining Enterprise Partners, Dr. Zsebo held executive positions at Remedyne Corporation, a biotechnology company, Connetics Corporation, a specialty pharmaceutical company, ALZA Corporation, a pharmaceutical and medical systems company, Cell Genesys, Inc., a biotechnology company, and Amgen Inc., a biotechnology company. Dr. Zsebo received a B.S. in Biochemistry from the University of Maryland, an M.S. in Biochemistry and Biophysics from Oregon State University and a Ph.D. in Comparative Biochemistry from the University of California, Berkeley. Our Nominating and Corporate Governance Committee believes that Dr. Zsebo's 30 years of experience in the pharmaceutical industry, experience with drug development and service as our Chief Executive Officer qualify her to serve on our Board of Directors.

DIRECTORS CONTINUING IN OFFICE UNTIL THE 2017 ANNUAL MEETING

Peter K. Honig, M.D., M.P.H., 58, has served on our Board of Directors since March 2014. Dr. Honig currently serves as Senior Vice President of Worldwide Regulatory Affairs at Pfizer Inc, a global pharmaceutical company. Prior to this position, from July 2010 to May 2014, Dr. Honig served as the Head of Global Regulatory Affairs, Patient Safety and Quality Assurance at AstraZeneca, Inc., a global innovation-driven biopharmaceutical company. Dr. Honig also serves as a director of Orexigen Therapeutics, Inc., a biopharmaceutical company focused on the treatment of obesity. From January 2003 through December 2009, Dr. Honig served as Senior Vice President, Worldwide Regulatory Affairs and Product Safety at Merck & Co., Inc., a global healthcare company. From March 2002 to January 2003, Dr. Honig was Merck's Vice President, Worldwide Product Safety and Quality Assurance. Prior to Merck, from 1993 to 2002, Dr. Honig held various positions at the U.S. Food and Drug Administration ("FDA"), including Director of the Office of Drug Safety in the FDA's Center for Drug Evaluation and Research. Dr. Honig received his B.A. in History from Columbia College of Columbia University, his M.D. from the Columbia College of Physicians & Surgeons and his M.P.H from Columbia University School of Public Health. Our Nominating and Corporate Governance Committee believes that Dr. Honig's expertise and experience in the pharmaceutical industry qualifies him to serve on our Board of Directors.

Patrick Y. Yang, Ph.D., 67, has served on our Board of Directors since March 2014. Dr. Yang recently retired from F. Hoffman-La Roche AG, a global pharmaceutical and diagnostics company, where he served as Executive Vice President and Global Head of Pharmaceutical Technical Operations from January 2010 until March 2013. In this role, Dr. Yang was responsible for Roche's pharmaceutical and biotechnology manufacturing operations, process development, quality, regulatory, supply management, distribution, and procurement functions, based in Switzerland. From December 2003 through December 2009, Dr. Yang worked for Genentech, Inc., a leading biotechnology company, where his most recent position was Executive Vice President of Product Operations responsible for Genentech's manufacturing, engineering, process development, regulatory, quality, compliance, and supply chain management functions. Prior to Genentech, Dr. Yang held several leadership roles at Merck, including Vice President of Asia/Pacific Operations and Vice President of Supply Chain Management. He also previously worked at General Electric Co. and Life Systems, Inc. in research, development, and manufacturing operations. Dr. Yang currently works as a biotech industry consultant. He serves on the board of directors of Tesoro Corporation, a publicly held company in the business of refining and marketing petroleum products, the board of directors of Codexis, Inc., a publicly held company in the development and production of custom industrial enzymes for use in the pharmaceutical, chemical and biofuel production; and on the board of directors of Amyris, Inc., a synthetic biology company. Dr. Yang holds a Ph.D. in engineering from Ohio State University. Our Nominating and Corporate Governance Committee believes that Dr. Yang's expertise and experience in the pharmaceutical and biotechnology industries qualifies him to serve on our Board of Directors.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

INDEPENDENCE OF THE BOARD OF DIRECTORS

As required under the NASDAQ Stock Market ("NASDAQ") listing standards, a majority of the members of a listed company's Board of Directors must qualify as "independent," as affirmatively determined by the Board of Directors. The Board consults with the Company's counsel to ensure that the Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of NASDAQ, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board has affirmatively determined that all of our directors, except Dr. Zsebo who is not considered independent because she is an executive officer of the Company, are independent directors as defined by Rule 5605(a) (2) of the NASDAQ Listing Rules. In making this determination, the Board found that none of these directors had a material or other disqualifying relationship with the Company.

BOARD LEADERSHIP STRUCTURE

Our Board of Directors is currently chaired by Mr. Narachi. As a general policy, our Board of Directors believes that separation of the positions of Chairman and Chief Executive Officer reinforces the independence of the Board from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of the Board as a whole. As such, Dr. Zsebo serves as our Chief Executive Officer while Mr. Narachi serves as our Chairman of the Board of Directors but is not an employee. We expect and intend the positions of Chairman of the Board of Directors and Chief Executive Officer to continue to be held by two individuals in the future.

ROLE OF THE BOARD IN RISK OVERSIGHT

One of the key functions of our Board of Directors is informed oversight of our risk management process. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various standing committees of our Board of Directors that address risks inherent in their respective areas of oversight. In particular, our Board of Directors is responsible for monitoring and assessing strategic risk exposure and our Audit Committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The Audit Committee also monitors compliance with legal and regulatory requirements. Our Nominating and Corporate Governance Committee monitors the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability-creating conduct. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

MEETINGS OF THE BOARD OF DIRECTORS

The Board of Directors met eight times during the last fiscal year. All directors attended at least 75% of the aggregate number of meetings of the Board and of the committees on which they served, held during the portion of the last fiscal year for which they were directors or committee members, respectively.

The Board of Directors does not have a formal policy with respect to the attendance of members of the Board of Directors at the annual meetings of stockholders. Dr. Zsebo, our Chief Executive Officer and a member of our Board of Directors, and Mr. Narachi, our Chairman, were in attendance at our 2014 annual meeting.

INFORMATION REGARDING COMMITTEES OF THE BOARD OF DIRECTORS

The Board has an Audit Committee, a Compensation Committee, and a Nominating and Corporate Governance Committee. The following table provides membership and meeting information for fiscal 2014 for each of these Board committees:

| | | | Nominating and |
|------------------------------------|-------|--------------|----------------------|
| Name | Audit | Compensation | Corporate Governance |
| Michael Narachi ^(a) | Х | X* | Х |
| Gregg Alton | | Х | X* |
| Graham Cooper(b) | X* | Х | Х |
| Todd Foley(c) | Х | | |
| Joshua Funder, Ph.D.(d) | Х | | |
| Peter Honig, M.D., MPH | | | Х |
| Johan Kördel, Ph.D. ^(e) | | Х | |
| Patrick Yang, Ph.D. | | Х | |
| Total Meetings in Fiscal Year 2014 | 4 | 4 | 4 |
| | | | |

* Committee Chairperson

- (a) Mr. Narachi's service as a member of the Nominating and Corporate Governance Committee ended following the 2014 annual meeting.
- (b) Mr. Cooper's service as a member of the Compensation Committee ended following the 2014 annual meeting.
- (c) Mr. Foley's service as a director and as a member of the Audit Committee ended following the 2014 annual meeting.
- (d) Dr. Funder's service as a director and as a member of the Audit Committee will end immediately following the annual meeting.
- (e) Dr. Kördel resigned from the Board of Directors in March 2014 and ceased being a member of the Compensation Committee upon his resignation.

Below is a description of each committee of the Board of Directors.

Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. The Board of Directors has determined that each member of each committee satisfies the NASDAQ Stock Market and Securities and Exchange Commission ("SEC") independence requirements.

Audit Committee

The Audit Committee of the Board of Directors was established by the Board in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), to oversee the Company's corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, the Audit Committee performs several functions, including, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;
- reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
- monitoring the rotation of partners of our independent auditors on our engagement team as required by law;
- prior to engagement of any independent auditor, and at least annually thereafter, reviewing relationships that may reasonably be thought to bear on their independence, and assessing and otherwise taking the appropriate action to oversee the independence of our independent auditor;



- reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations," and discussing the statements and reports with our independent auditors and management;
- reviewing with our independent auditors and management significant issues that arise regarding accounting principles and financial statement
 presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;
- reviewing with management and our auditors any earnings announcements and other public announcements regarding material developments;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting or auditing
 matters and other matters;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and providing oversight of any related-person transactions in accordance with our related-person transaction policy and reviewing and
 monitoring compliance with legal and regulatory responsibilities, including our code of business conduct and ethics;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk
 management is implemented;
- reviewing on a periodic basis our investment policy; and
- reviewing and evaluating on an annual basis the performance of the Audit Committee, including compliance of the Audit Committee with its charter.

As stated above, the Audit Committee is currently composed of three directors: Mr. Cooper (Chair), Dr. Funder and Mr. Narachi. Mr. Foley was a member of the Audit Committee during 2014 until the date of our 2014 annual meeting and his departure from our Board of Directors. Dr. Funder's service as a director and as a member of the Audit Committee will end immediately following the 2015 annual meeting, at which time Dr. Honig will be appointed to the Audit Committee. The Audit Committee met four times during 2014. The Board has adopted a written Audit Committee charter that is available to stockholders on the Company's website at www.celladon.com.

The Board of Directors reviews the NASDAQ listing standards definition of independence for Audit Committee members on an annual basis and has determined that all members of the Company's Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A) of the NASDAQ listing standards and Rule 10A-3 of the Exchange Act).

The Board of Directors has also determined that Mr. Cooper qualifies as an "audit committee financial expert," as defined in applicable SEC rules. The Board made a qualitative assessment of Mr. Cooper's level of knowledge and experience based on a number of factors, including his formal education and previous and current experience in financial roles.

Effective immediately following the annual meeting, the Audit Committee will be composed of Mr. Cooper (Chair), Dr. Honig and Mr. Narachi.

Report of the Audit Committee of the Board of Directors*

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2014 with management of the Company. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by Auditing Standard No. 16, *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board

("PCAOB"). The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee has 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 fiscal year ended December 31, 2014.

Graham Cooper (Chair) Joshua Funder, Ph.D. Mike Narachi

* The material in this report is not "soliciting material," is not deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference in any filing of the Company under the Exchange Act or the Securities Act of 1933, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Compensation Committee

The Compensation Committee is composed of three directors: Mr. Narachi (Chair), Mr. Alton and Dr. Yang. All members of the Compensation Committee are independent as independence is currently defined in Rule 5605(d)(2)(A) of the NASDAQ listing standards and Rule 10C-1 of the Exchange Act. The Compensation Committee met four times during the prior fiscal year. The Board has adopted a written Compensation Committee charter that is available to stockholders on the Company's website at www.celladon.com.

The Compensation Committee of the Board of Directors acts on behalf of the Board to review, adopt or recommend for adoption, and oversee the Company's compensation strategy, policies, plans and programs. For this purpose, the Compensation Committee performs several functions, including, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full Board of Directors regarding) our overall
 compensation strategy and policies;
- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full Board of Directors regarding) the compensation and other terms of employment of our executive officers;
- reviewing and making recommendations to the full Board of Directors regarding performance goals and objectives relevant to the compensation
 of our executive officers and assessing their performance against these goals and objectives;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full Board of Directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
- reviewing and making recommendations to the full Board of Directors regarding the type and amount of compensation to be paid or awarded to our non-employee board members;
- establishing policies with respect to votes by our stockholders to approve executive compensation to the extent required by Section 14A of the Exchange Act and, if applicable, determining our recommendations regarding the frequency of advisory votes on executive compensation;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;

- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;
- reviewing the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full Board of Directors regarding) the terms of any employment agreements, severance arrangements, change of control protections and any other compensatory arrangements for our executive officers;
- reviewing the adequacy of its charter on a periodic basis;
- reviewing with management and approving our disclosures under the caption "Compensation Discussion and Analysis" in our periodic reports or proxy statements to be filed with the SEC, to the extent such caption is included in any such report or proxy statement;
- · preparing the report that the SEC requires in our annual proxy statement; and
- reviewing and assessing on an annual basis the performance of the Compensation Committee.

Compensation Committee Processes and Procedures

Our Compensation Committee generally meets at least twice annually and with greater frequency if necessary. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with the Chief Executive Officer. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice or to otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding her compensation or individual performance objectives. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of the Company. In addition, under the charter, the Compensation Committee has the authority to obtain, at the expense of the Company, advice and assistance from internal and external legal, accounting or other advisors and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. The Compensation Committee has direct responsibility for the oversight of the work of any advisers engaged for the purpose of advising the Committee. In particular, the Compensation Committee has the sole authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms. Under the charter, to the extent required by SEC and NASDAQ rules, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel or other adviser to the Compensation Committee, other than in-house legal counsel and certain other types of advisers, only after taking into consideration six factors, prescribed by the SEC and NASDAQ, that bear upon the adviser's independence; however, there is no requirement that any adviser be independent. The Compensation Committee may, pursuant to its charter, form and delegate authority to subcommittees as appropriate, including, but not limited to, a subcommittee composed of one or more members of the Board to grant stock awards under the Company's equity incentive plans to employees who are not officers. In June 2014, the Board delegated to the Compensation Committee, as permitted under our 2013 equity incentive plan ("2013 plan"), the non-exclusive authority to delegate to each of our Chief Executive Officer, President and Chief Financial Officer, and Vice President, Finance & Administration (the "authorized officers"), the non-exclusive authority to grant stock options exercisable for up to 100,000 shares in the aggregate under the 2013 plan to employees who are not officers of the Company, within ranges to be determined and approved by the Compensation Committee (the "option grant guidelines"). In August 2014, the Compensation Committee determined and approved the option grant guidelines and delegated to the authorized officers, with the authority for each to act independently, the non-exclusive authority to grant stock options under the 2013 plan to new-hire employees who are not officers of

the Company, within the option grant guidelines. The purpose of this delegation of authority is to enhance the flexibility of option administration within the Company and to facilitate the timely grant of options to non-management employees, namely new hires, within specified limits approved by the Compensation Committee. During fiscal 2014, the authorized officers exercised their authority to grant options to purchase an aggregate of 76,200 shares of the Company's common stock to non-officer employees.

In October 2013, the Compensation Committee, after taking into consideration the six factors prescribed by the SEC and NASDAQ described above, engaged Frederic W. Cook & Co. ("FWC") as its compensation consultant. FWC was retained to provide an assessment of the Company's executive and director compensation programs in comparison to executive and director compensation programs at selected publicly-traded peer companies. As part of its engagement, FWC was requested by the Compensation Committee to develop a comparative group of companies and to perform analyses of competitive performance and compensation levels for that group. FWC ultimately developed recommendations that were presented to the Compensation Committee for its consideration. Following an active dialogue with FWC, the Compensation Committee recommended that the Board of Directors approve certain modifications to our executive compensation program based in part on FWC's recommendations. These modifications were approved by the Board as recommended by the Compensation Committee. Our 2014 executive compensation program is discussed in the Executive Compensation section of this proxy statement.

The Compensation Committee generally considers most of the significant adjustments to annual compensation, target bonuses and equity awards and establishes new performance objectives at one or more meetings held during the first quarter of the year. The Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of the Company's compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at periodic meetings throughout the year on an as-needed basis. Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. For executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted to the Committee by the Chief Executive Officer. In the case of the Chief Executive Officer, the evaluation of her performance is conducted by the Compensation Committee, which recommends any adjustments to her compensation as well as awards to be granted. For all executives and directors as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executives in various hypothetical scenarios, executive and director stock ownership information, company stock performance data, analyses of historical executive compensation levels and current Company-wide compensation paid at other companies identified by the consultant. Modifications to executive compensation must be approved by the full Board of Directors prior to implementation.

Compensation Committee Interlocks and Insider Participation

As stated above, the Compensation Committee currently consists of Mr. Narachi (Chair), Mr. Alton and Dr. Yang. Dr. Kördel resigned from the Compensation Committee in March 2014 concurrently with his resignation from the Board. Mr. Cooper served on the Compensation Committee from March 2014 to May 2014. No member of the Compensation Committee has ever been an officer or employee of ours. None of our executive officers currently serves, or has served during the last completed fiscal year, on the Compensation Committee or Board of Directors of any other entity that has one or more executive officers serving as a member of our Board of Directors or Compensation Committee.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of the Board of Directors is responsible for identifying, reviewing and evaluating candidates to serve as directors of the Company (consistent with criteria approved by the Board), reviewing and evaluating incumbent directors, selecting or recommending to the Board for selection candidates for election to the Board of Directors, making recommendations to the Board regarding the membership of the committees of the Board, assessing the performance of the Board, and developing a set of corporate governance principles for the Company.

The Nominating and Corporate Governance Committee is composed of three directors: Mr. Alton (Chair), Mr. Cooper and Dr. Honig. All members of the Nominating and Corporate Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the NASDAQ listing standards). The Nominating and Corporate Governance Committee met four times during 2014. The Board has adopted a written Nominating and Corporate Governance Committee on the Company's website and www.celladon.com.

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum gualifications, including the ability to read and understand basic financial statements and having the highest personal integrity and ethics. The Nominating and Corporate Governance Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of the Company's stockholders. However, the Nominating and Corporate Governance Committee retains the right to modify these qualifications from time to time. Candidates for director nominees are reviewed in the context of the current composition of the Board, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, the Nominating and Corporate Governance Committee typically considers diversity, age, skills and such other factors as it deems appropriate, given the current needs of the Board and the Company, to maintain a balance of knowledge, experience and capability. In the case of incumbent directors whose terms of office are set to expire, the Nominating and Corporate Governance Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. In the case of new director candidates, the Nominating and Corporate Governance Committee also determines whether the nominee is independent for NASDAQ purposes, which determination is based upon applicable NASDAQ listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Corporate Governance Committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. The Nominating and Corporate Governance Committee meets to discuss and consider the candidates' qualifications and then selects a nominee by majority vote which we expect will typically be recommended to the full board.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. The Nominating and Corporate Governance Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether or not the candidate was recommended by a stockholder. Stockholders who wish to recommend individuals for consideration by the Nominating and Corporate Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation to the Nominating and Corporate Governance Committee at the following address: c/o Celladon Corporation, 11988 El Camino Real, Suite 650, San Diego, California 92130, Attn: Secretary, no later than the close of business on the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's annual meeting. Submissions must include the name and address of the Company stockholder on whose behalf the submission is made; the number

of Company shares that are owned beneficially by such stockholder as of the date of the submission; the full name of the proposed candidate; a description of the proposed candidate's business experience for at least the previous five years; complete biographical information for the proposed candidate; and a description of the proposed candidate's qualifications as a director. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director if elected.

STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

The Company's Board has adopted a formal process by which stockholders may communicate with the Board or any of its directors. Stockholders who wish to communicate with the Board may do so by sending written communications addressed to the Secretary of Celladon at 11988 El Camino Real, Suite 650, San Diego, California 92130. These communications will be reviewed by the Secretary of Celladon, who will determine whether the communication is appropriate for presentation to the Board or the relevant director. The purpose of this screening is to allow the Board to avoid having to consider irrelevant or inappropriate communications (such as advertisements, solicitations and hostile communications).

CODE OF ETHICS

The Company has adopted a Code of Business Conduct and Ethics that applies to all officers, directors and employees. The Code of Business Conduct and Ethics is available on the Company's website at www.celladon.com. If the Company makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code to any executive officer or director, the Company will promptly disclose the nature of the amendment or waiver on its website.

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides certain information with respect to all of the Company's equity compensation plans in effect as of December 31, 2014.

| Equity Compensation | Plan | Information |
|----------------------------|------|-------------|
|----------------------------|------|-------------|

| Plan Category | Number of securities to be issued upon exercise of outstanding options, warrants and rights (a) | exerci outstan | ted-average ise price of ding options, ts and rights (b) | Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a)) (c) |
|--|---|-------------------|--|--|
| Equity compensation plans approved by security | <u> </u> | | <u> </u> | |
| holders | 2,408,634 | \$ | 7.18 | 294,845 |
| Equity compensation plans not approved by security | | | | |
| holders | — | | | — |
| Total | 2,408,634 | \$ | 7.18 | 294,845 |
| | | | | |

PROPOSAL 2

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has selected Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2015 and has further directed that management submit the selection of its independent registered public accounting firm for ratification by the stockholders at the annual meeting. Ernst & Young has audited the Company's financial statements since its inception in 2000. Representatives of Ernst & Young are expected to be present at the annual meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of Ernst & Young as the Company's independent registered public accounting firm. However, the Audit Committee of the Board is submitting the selection of Ernst & Young to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee of the Board will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee of the Board in its discretion may direct the appointment of different independent auditors 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.

The affirmative vote of the holders of a majority of the shares present in person or represented by proxy and entitled to vote on the matter at the annual meeting will be required to ratify the selection of Ernst & Young.

PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table represents aggregate fees billed to the Company for the fiscal years ended December 31, 2014 and December 31, 2013, by Ernst & Young, the Company's principal accountant.

| | FISCAL Y | ear Ended |
|------------------------|------------|--------------|
| | 2014 | 2013 |
| Audit Fees (1) | \$ 333,023 | \$ 1,007,862 |
| Audit-related Fees (2) | 22,300 | — |
| Tax Fees (3) | 60,144 | 128,798 |
| All Other Fees(4) | 1,995 | |
| Total Fees | \$ 417,462 | \$ 1,136,660 |

Elecal Vear Ended

- (1) Audit fees consist of fees billed for professional services by Ernst & Young for audit and quarterly review of our financial statements and review of our registration statement for our initial public offering, and related services that are normally provided in connection with statutory and regulatory filings or engagements.
- (2) Audit-Related Fees include services relating to accounting consultations and reviews and due diligence services
- (3) Tax Fees include services relating to tax compliance, tax advice, and tax planning in the United States and Europe.
- (4) Includes amounts billed for annual subscription to Ernst and Young LLP's online resource library.

All fees described above were pre-approved by the Audit Committee.

In connection with the audit of the 2014 financial statements, the Company entered into an engagement agreement with Ernst & Young that sets forth the terms by which Ernst & Young will perform audit services for the Company. That agreement is subject to alternative dispute resolution procedures and an exclusion of punitive damages.

PRE-APPROVAL POLICIES AND PROCEDURES

The Audit Committee has adopted a policy and procedures for the pre-approval of audit and non-audit services rendered by the Company's independent registered public accounting firm, Ernst & Young. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services and tax services up to specified amounts. Pre-approval may also be given as part of the Audit Committee's approval of the scope of the engagement of the independent auditor or on an individual, explicit, case-by-case basis before the independent auditor is engaged to provide each service. The pre-approval of services may be delegated to one or more of the Audit Committee's members, but the decision must be reported to the full Audit Committee at its next scheduled meeting.

The Audit Committee has determined that the rendering of services other than audit services by Ernst & Young is compatible with maintaining the principal accountant's independence.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" PROPOSAL 2

EXECUTIVE OFFICERS

Krisztina M. Zsebo, Ph.D. 59, has served as our Chief Executive Officer and a member of our Board of Directors since 2004, and served as our President from 2004 until June 2014. For additional information regarding Dr. Zsebo's industry experience and education, see above under "Directors Continuing in Office Until the 2016 Annual Meeting."

Paul B. Cleveland, 58, has served as our President and Chief Financial Officer since June 2014. From February 2013 to August 2013, Mr. Cleveland served as Executive Vice President, Corporate Strategy and Chief Financial Officer of Aragon Pharmaceuticals, Inc., a private biotechnology company focused on the development of small-molecule drugs for the treatment of hormone-dependent cancers. From April 2011 to February 2013, Mr. Cleveland served as General Partner and Chief Operating Officer of Mohr Davidow Ventures. From January 2006 to February 2011, Mr. Cleveland served as Executive Vice President, Corporate Development and Chief Financial Officer of Affymax, Inc., a biopharmaceutical company. From April 2004 to December 2005, he served as a managing director at Integrated Finance, Ltd., an investment bank. From September 1996 to April 2003, Mr. Cleveland served as a managing director at investment bank J.P.Morgan Chase and Co. and a predecessor firm, Hambrecht & Quist. From January 1993 to September 1996, Mr. Cleveland was a partner at Cooley LLP, from December 1988 to December 1992, he was a corporate attorney at Sidley Austin LLP and from September 1981 to November 1988, he was a corporate attorney at Davis Polk & Wardwell LLP. He currently serves on the Board of Directors of Sangamo BioSciences, Inc. Mr. Cleveland received an A.B. from Washington University in St. Louis and a J.D. from Northwestern University School of Law.

Rebecque J. Laba, 53, has served as our Vice President, Corporate Operations since January 2015 and served as our Vice President of Finance and Administration from September 2007 to January 2015. Previously, she served as a consultant to us on finance and administrative matters since October 2005. From 1999 to 2005, Ms. Laba served in various financial and operational roles at Idun Pharmaceuticals, Inc. until Idun was acquired by Pfizer Inc., a pharmaceutical company, in 2005. From 1997 to 1999, Ms. Laba worked at Asset Management Group, where she served in various financial and operational roles.

Elizabeth E. Reed, 44, has served as our Vice President, General Counsel and Secretary since June 2014, and before that served as a legal consultant to us since February 2014. From 2013 to June 2014, Ms. Reed served as a legal consultant for several companies in the life sciences industry. From 2001 to 2012, Ms. Reed led the legal function at Anadys Pharmaceuticals, Inc., a publicly traded biopharmaceutical company, most recently serving as Senior Vice President, Legal Affairs, General Counsel and Corporate Secretary until Anadys' acquisition by Roche. Prior to Anadys, Ms. Reed was an attorney with the law firms Cooley LLP and Brobeck,

Phleger & Harrison LLP. Ms. Reed is a member of the State Bar of California and received her B.S. in Business Administration from the Haas School of Business at the University of California, Berkeley and holds a J.D., cum laude, from Harvard Law School.

Jeffrey J. Rudy, 53, has served as our Vice President, Clinical Operations since 2006. From 1997 to 2006, Mr. Rudy worked at Agouron Pharmaceuticals (prior to its acquisition by the Warner-Lambert Company, which was subsequently acquired by Pfizer) where he served in roles of increasing responsibility within its clinical research operations, including portfolio manager of the ophthalmology franchise and director of development operations. From 1995 to 1997, Mr. Rudy was at Gilead Sciences, Inc., a biopharmaceutical company, where he was clinical program manager in the clinical research department overseeing a number of antiviral compounds in early development. From 1991 to 1994, Mr. Rudy was at Amgen, where he worked in clinical affairs on a number of antiviral programs. Mr. Rudy received his B.S. in Microbiology from Ohio State University.

Ryan K. Takeya, 46, has served as our Vice President, Manufacturing since April 2012. Previously, Mr. Takeya served as a biotechnology process development and manufacturing consultant from 2010 until April 2012, other than during 2011 when he was employed by Dendreon Corporation, a biotechnology company, where he was involved with the transfer of the PROVENGE antigen manufacturing process to a secondary commercial manufacturing site. From August 1996 to December 2009, Mr. Takeya served in the Manufacturing Group at Targeted Genetics Corporation, a biotechnology company, where he oversaw in-house and contract manufacturing of clinical gene therapy products, including clinical supplies used in the MYDICAR clinical program. From 1993 to 1996, Mr. Takeya held various process development and process transfer roles at Immunex Corporation, a biotechnology company. Mr. Takeya received his B.A. in Chemistry from the University of Washington.

Fredrik Wiklund, 44, has served as our Vice President, Corporate Development and Investor Relations since August 2013 and as our Vice President, Corporate Development from June 2013 to August 2013. Before that, he served as our Senior Director, Corporate Development from April 2012 to June 2013. From September 2009 to April 2012, Mr. Wiklund served as a consultant to us on business development matters. From November 2003 to November 2008, Mr. Wiklund was head of corporate development and investor relations at Tercica, Inc., a biopharmaceutical company, until its acquisition by the Ipsen Group, a biotechnology company, in 2008. From January 2001 to June 2003, Mr. Wiklund was at Lehman Brothers, Inc., a global financial services firm, where he served in the Investment Banking Health Care Group. From 1996 to 2000, Mr. Wiklund served as an antiviral specialist at Gilead Sciences. Mr. Wiklund received his M.B.A. from the University of Southern California and his B.A. in International Relations from the University of San Diego.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information regarding the ownership of the Company's common stock as of March 13, 2015 by: (i) each director; (ii) each of our executive officers named in the Summary Compensation Table below; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock.

The following table is based upon information supplied by officers, directors and principal stockholders and Schedules 13G filed with the SEC. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, the Company believes that each of the stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 23,827,918 shares outstanding on March 13, 2015, adjusted as required by rules promulgated by the SEC. Unless otherwise indicated, the address for the following stockholders is c/o Celladon Corporation, 11988 El Camino Real, Suite 650, San Diego, California 92130.

| | Beneficial O | Beneficial Ownership | | |
|---|------------------|----------------------|--|--|
| Beneficial Owner | Number of Shares | Percent of Total | | |
| Greater than 5% stockholders | | | | |
| Eagle Asset Management | 2,308,952 | 9.7% | | |
| 880 Carillon Parkway | | | | |
| St. Petersburg, FL 33716 | | | | |
| Entities Affiliated with Enterprise Partners(1) | 1,921,034 | 8.1% | | |
| 2223 Avenida de la Playa, Suite 205 | | | | |
| La Jolla, CA 92037 | | | | |
| Pfizer Inc. | 1,828,495 | 7.7% | | |
| c/o Pfizer Venture Investments | | | | |
| 235 E. 42nd Street | | | | |
| New York, NY 10017 | | | | |
| Lundbeckfond Invest A/S(2) | 1,774,349 | 7.4% | | |
| Vestagervej 17 | | | | |
| DK-2900 Hellerup | | | | |
| Denmark | | | | |
| GBS Bioventures IV(4) | 1,412,310 | 5.9% | | |
| Level 5, 71 Collins Street | | | | |
| Melbourne, Vic 3000 | | | | |
| Australia | | | | |
| Palo Alto Investors(3) | 1,403,800 | 5.9% | | |
| 470 University Avenue | _,, | | | |
| Palo Alto, CA 94301 | | | | |
| | | | | |
| Directors and Named Executive Officers | | | | |
| Krisztina M. Zsebo, Ph.D.(5) | 329,647 | 1.4% | | |
| Elizabeth E. Reed (6) | 1,773 | * | | |
| Paul B. Cleveland | _ | * | | |
| Gregg Alton (7) | 25,423 | * | | |
| Graham Cooper(8) | 25,423 | * | | |
| Joshua Funder, Ph.D.(9) | 17,499 | * | | |
| Michael Narachi(10) | 96,274 | * | | |
| Peter Honig, M.D.(11) | 5,854 | * | | |
| Patrick Yang, Ph.D.(12) | 15,554 | * | | |
| | -, | | | |

All executive officers and directors as a group (13 persons) (13)

Less than one percent.

(1) Consists of (a) 883,674 shares of common stock and 8,581 shares issuable upon the exercise of warrants held by Enterprise Partners Liquidating Trust V, (b) 1,016,477 shares of common stock and 8,581 shares issuable upon the exercise of warrants held by Enterprise Partners Liquidating Trust VI, and (c) 3,721 shares issuable upon the exercise of warrants held by Enterprise Partners Management, LLC.

821,464

3.3%

(2) Includes 28,666 shares issuable upon the exercise of warrants.

- (3) Anthony Joonkyoo Yun, MD and Patrick Lee, MD are co-managers of Palo Alto Investors and have shared voting and dispositive power over these shares. Drs. Yun and Lee have disclaimed beneficial ownership of these shares except to the extent of their pecuniary interest therein.
- (4) Includes 53,807 shares issuable upon the exercise of warrants held by GBS Bioventures IV and 17,499 shares that Dr. Funder has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (5) Includes 326,522 shares that Dr. Zsebo has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (6) Includes 1,604 shares that Ms. Reed has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (7) Consists of 25,423 shares that Mr. Alton has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (8) Consists of 25,423 shares that Mr. Cooper has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
 (9) Consists of 17,499 shares that Dr. Funder has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (1) Includes 33,774 shares that Mr. Narachi has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (11) Consists of 5,854 shares that Dr. Honig has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (12) Consists of 15,554 shares that Dr. Yang has the right to acquire from us within 60 days of March 13, 2015 pursuant to the exercise of stock options.
- (13) Consists of the shares described in footnotes (5) through (12) and (i) 28,476 shares of common stock and (ii) 275,541 shares issuable upon the exercise of stock options within 60 days of May 13, 2015 held by executive officers who are not listed in the table above.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires the Company's directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To our knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2014, all Section 16(a) filing requirements applicable to our officers, directors and persons who own more than ten percent of a registered class of our equity securities were complied with and filed on time.

EXECUTIVE COMPENSATION

Our named executive officers for the year ended December 31, 2014, which consist of our principal executive officer and our two other most highly compensated executive officers, are:

- Krisztina M. Zsebo, Ph.D., our Chief Executive Officer;
- Paul B. Cleveland, our President and Chief Financial Officer; and
- Elizabeth E. Reed, our Vice President and General Counsel.

Summary Compensation Table

| | | | | Non-equity incentive | | |
|---|------|--------------------|------------------------------|----------------------------------|-----------------------------------|---------------|
| Name and principal position | Year | Salary (\$) (1) | Option awards (\$) (2) | plan compensation (\$) (3) | All other compensation (\$) | Total (\$) |
| Krisztina M. Zsebo, Ph.D. | 2014 | 479,296 | 745,893 | 258,086 | 70,641(4) | 1,553,916 |
| Chief Executive Officer | 2013 | 417,524 | — | 83,505 | 20,152 | 521,181 |
| Paul B. Cleveland ⁽⁵⁾ President and Chief Financial Officer | 2014 | 189,707 | 2,786,511 | 118,114 | 1,165(6) | 3,095,497 |
| Elizabeth E. Reed(7) Vice President and General Counsel | 2014 | 233,806 | 442,023 | 82,500 | 11,808(8) | 770,137 |

Vice President and General Counsel

- (1) Mr. Cleveland's and Ms. Reed's 2014 annual base salaries were \$355,700 and \$275,000, respectively. The amount shown for Mr. Cleveland in the table above reflects base salary actually paid in 2014 following his employment start date in June 2014. The amount shown for Ms. Reed in the table above reflects base salary actually paid in 2014 following her employment start date in June 2014 and the amount paid to her pursuant to her prior consulting agreement with us dated February 25, 2014 in the amount of \$79,500.
- (2) In accordance with SEC rules, this column reflects the aggregate grant date fair value of the option awards granted during the applicable year computed in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718 for stock-based compensation transactions (ASC 718). Assumptions used in the calculation of these amounts are included in Note 7 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 31, 2015. These amounts do not reflect the actual economic value that will be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options.
- (3) Amounts shown represent annual performance-based bonuses earned for the applicable year. For more information, see below under "—Annual Performance-Based Bonus Opportunity."
- (4) Amount shown represents \$29,448 in 401(k) matching contributions, \$1,050 premiums for life, disability and accidental death and dismemberment insurance, \$1,200 personal life insurance subsidy. These benefits are provided to the named executive officers on the same terms as provided to all of our regular full-time employees in the United States. The amount shown also includes \$38,943 for commuting expenses paid by us on behalf of or directly to, as applicable, Dr. Zsebo. For more information regarding these benefits, see below under "—Perquisites, Health, Welfare and Retirement Benefits."
- (5) Mr. Cleveland was not a named executive officer in 2013.
- (6) Amount shown represents \$525 premiums for life, disability and accidental death and dismemberment insurance, and a \$640 personal life insurance subsidy paid by us on behalf of or directly to, as applicable, Mr. Cleveland. These benefits are provided to the named executive officers on the same terms as provided to all of our regular full-time employees in the United States. For more information regarding these benefits, see below under "— Perquisites, Health, Welfare and Retirement Benefits."
- (7) Ms. Reed was not a named executive officer in 2013.

(8) Amount shown represents \$10,610 in 401(k) matching contributions, \$525 premiums for life, disability and accidental death and dismemberment insurance, and a \$673 personal life insurance subsidy paid by us on behalf of or directly to, as applicable, Ms. Reed. These benefits are provided to the named executive officers on the same terms as provided to all of our regular full-time employees in the United States. For more information regarding these benefits, see below under "—Perquisites, Health, Welfare and Retirement Benefits."

Annual Base Salary

The compensation of our named executive officers is generally determined and approved by our Board of Directors, based on the recommendation of the Compensation Committee of our Board. Our Board of Directors approved the following 2014 base salaries for our named executive officers. The 2014 base salary for Dr. Zsebo was effective on March 19, 2014 while Ms. Reed's and Mr. Cleveland's base salaries were effective in connection with their hire dates on June 9, 2014 and June 19, 2014 respectively.

| Name | 2014 Base Salary (\$) |
|---------------------------|--------------------------|
| Krisztina M. Zsebo, Ph.D. | 495,000 |
| Paul B. Cleveland | 355,700 |
| Elizabeth E. Reed | 275,000 |

Annual Performance-Based Bonus Opportunity

In addition to base salaries, our named executive officers are eligible to receive annual performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve defined annual corporate goals and to reward our executives for individual achievement towards these goals. The annual performance-based bonus each named executive officer is eligible to receive is generally based on the extent to which we achieve the corporate goals that our Board of Directors establishes each year. At the end of the year, our Board of Directors and/or our Compensation Committee reviews our performance against each corporate goal and approves the extent to which we achieved each of our corporate goals.

In determining actual bonus award levels our Board of Directors will generally consider each named executive officer's individual contributions towards reaching our annual corporate goals but does not typically establish specific individual goals for our named executive officers. For 2014, our Board of Directors established target bonuses as a percentage of their respective annual base salaries of 55% for Dr. Zsebo, 35% for Mr. Cleveland and 30% for Ms. Reed.

Our Board of Directors established five sets of corporate goals for 2014. The first set of goals, weighted at 30% towards overall corporate goal achievement, consisted of clinical goals relating to our CUPID 2 trial for MYDICAR and additional clinical trials that were to potentially initiate during 2014. The second set of goals, weighted at 10% towards overall corporate goal achievement, consisted of biostatistics goals relating to the analysis of data from our CUPID 2 trial. The third set of corporate goals, weighted at 20% towards overall corporate goal achievement, consisted of goals relating to regulatory activities in the United States and the European Union associated with MYDICAR and our companion diagnostic. The fourth set of goals, weighted at 20% towards overall corporate goals. The final set of goals, weighted at 20% towards overall corporate goals. The final set of goals, weighted at 20% towards overall corporate goals. No specific individual goals were established for any of our named executive officers for 2014.

In December 2014, our Board of Directors reviewed, on a preliminary basis, the level of achievement of our 2014 corporate goals, and in January 2015 our Compensation Committee conducted a complete assessment of the level of achievement for 2014 and determined that we had achieved each of the corporate goals. Our



Compensation Committee determined that we had achieved our clinical goals by completing enrollment of CELL-004 with 230 or more patients by the end of February 2014 and by meeting the specified metrics for measuring speeding the time to un-blinding and analysis of CELL-004 and by maintaining consistency with Board approved strategy for the initiation of other clinical trials. Our Compensation Committee determined that we achieved our biostatics goal of being prepared to speed the time to a high quality analysis of data upon completion of data lock by our satisfaction of the specified metrics for measuring the biostatistics goal. With respect to our regulatory goals, our Compensation Committee determined that we had achieved our regulatory goals by completing specified activities and milestones related to the regulatory pathway for MYDICAR, including obtaining breakthrough therapy designation from the FDA. Our Compensation Committee determined that we had achieved our anufacture of the 2,000 liter commercial scale demonstration batch at Lonza and by conducting the specified process development related activities for 2014. Finally, our Compensation Committee determined that we achieved our financial and investor relations goals by maintaining 2014 operations within our approved budget and satisfying the specified public company investor relations metrics. Accordingly, our Compensation Committee awarded each of our named executive officers their target bonus opportunity for 2014 in recognition of our substantial achievement of our corporate goals and each of the executive's efforts towards our successful achievement of our corporate goals.

Accordingly, our Board of Directors awarded each of our named executive officers 100% of their target bonus opportunity for 2014 in recognition of our substantial achievement of our corporate goals and each of the executive's efforts towards our successful achievement of our corporate goals.

Equity-Based Incentive Awards

Our equity-based incentive awards are designed to align our interests with those of our employees and consultants, including our named executive officers. Our Board of Directors is responsible for approving equity grants. As of December 31, 2014, stock option awards were the only form of equity awards we granted to our named executive officers. Vesting of the stock option awards is tied to continuous service with us and serves as an additional retention measure. Our executives generally are awarded an initial grant upon commencement of employment. Additional grants may occur periodically in order to specifically incentivize executives with respect to achieving certain corporate goals or to reward executives for exceptional performance.

Prior to our initial public offering, we granted all equity awards pursuant to the 2012 equity incentive plan ("2012 plan") and the 2001 stock option plan ("2001 plan"), the terms of which are described below under "—Equity Benefit Plans." All options are granted with a per share exercise price equal to no less than the fair market value of a share of our common stock on the date of the grant of such award.

Generally our stock option awards vest over a four-year period subject to the holder's continuous service to us and may be granted with an early exercise feature. Such early exercise feature allows the holder to exercise and receive unvested shares of our stock, so that the holder may have a greater opportunity for gains on the shares to be taxed at long-term capital gains rates rather than ordinary income rates. From time to time as our Board of Directors considers appropriate, we may grant stock options that vest upon achievement of performance goals.

On January 29, 2014, in connection with our initial public offering, we granted Dr. Zsebo an option to purchase 134,000 shares of our common stock.

In March 2014, Ms. Reed was granted 5,500 options pursuant to the terms of her consulting agreement. In June 2014, the Compensation Committee approved the grant of 277,500 options to Mr. Cleveland and 65,000 options to Ms. Reed pursuant to the terms of their employment letter agreements and as an inducement to their commencement of employment with us.

On December 5, 2014, the Compensation Committee approved the grant to each of Dr. Zsebo, Mr. Cleveland and Ms. Reed of options to purchase 275,000, 140,000 and 72,000 shares of common stock, respectively. Each of these options was granted effective as of January 1, 2015 as an annual refresh grant. Each of these option grants vests and becomes exercisable over a four-year period following the grant date subject to the named executive officer's continued service with us and has an exercise price per share equal to the closing price of our stock on the grant date.

Agreements with our Named Executive Officers

Below are descriptions of our employment letter agreements with our named executive officers and our consulting agreement with Ms. Reed that was in effect prior to her employment letter agreement.

Agreement with Dr. Zsebo. We entered into an amended and restated employment letter agreement with Dr. Zsebo in August 2013, as amended in January 2014 that replaced her previous letter agreement dated July 2012 and became effective in January 2014 in connection with the execution and delivery of the underwriting agreement related to our initial public offering. Under the amended and restated letter agreement, Dr. Zsebo was entitled to an initial annual base salary of \$417,524, was eligible to receive an annual target performance bonus of up to 45% of her base salary as determined by the Board of Directors, and certain severance benefits, the terms of which are described below under "—Potential Payments Upon Termination or Change of Control." In March 2014, the Compensation Committee and the Board of Directors reviewed the salary and target bonus percentages for the executive officers and made certain changes. As approved by the Board of Directors, effective March 1, 2014, Dr. Zsebo was entitled to an annual base salary of \$495,000 and was eligible to receive an annual target performance bonus of up to 55% of her base salary as determined by the Board of Directors. Dr. Zsebo's base salary and annual target performance bonus of up to 55% of her base salary as determined by the Compensation Committee or, if deemed appropriate by the Compensation Committee, the Board of Directors.

Agreement with Mr. Cleveland. We entered into an employment letter agreement with Mr. Cleveland in May 2014. Under this letter agreement, Mr. Cleveland was entitled to an initial base salary of \$355,700, and was eligible to receive an annual target performance bonus of up to 35% of his base salary as determined by the Board of Directors, and certain severance benefits, the terms of which are described below under "—Potential Payments Upon Termination or Change of Control." Mr. Cleveland's base salary and annual target performance bonus percentage are subject to modification from time to time at the discretion of the Compensation Committee or, if deemed appropriate by the Compensation Committee, the Board of Directors.

Agreement with Ms. Reed. We entered into a consulting agreement with Ms. Reed in February 2014. Pursuant to the consulting agreement, in exchange for providing legal consulting services for us, Ms. Reed was paid a weekly retainer fee of \$5,000, plus an additional hourly fee if the number of hours worked per week exceeded the specified number of weekly retainer hours, and was granted an option to purchase 5,500 shares of our common stock. We entered into an employment letter agreement with Ms. Reed in May 2014, which replaced and terminated the consulting agreement described above. Under this letter agreement, Ms. Reed was entitled to an initial base salary of \$275,000, and was eligible to receive an annual target performance bonus of up to 30% of her base salary as determined by the Board of Directors, and certain severance benefits, the terms of which are described below under "—Potential Payments Upon Termination or Change of Control." Ms. Reed's base salary and annual target performance bonus percentage are subject to modification from time to time at the discretion of the Compensation Committee or, if deemed appropriate by the Compensation Committee, the Board of Directors.

Potential Payments Upon Termination or Change of Control

Each of our named executive officers' employment is "at will" and may be terminated at any time. Regardless of the manner in which a named executive officer's service terminates, the named executive officer is

entitled to receive amounts earned during his or her term of service, including salary and unused vacation pay. In addition, each of our named executive officers is eligible to receive certain benefits pursuant to his or her letter agreements with us described above under "—Agreements with our Named Executive Officers."

Under the terms of the named executive officers' employment letter agreements, upon the executive's termination without "cause," or resignation for "good reason," each as defined below, each of our named executive officers is eligible to receive continued base salary payments and COBRA premium payments for 12 months for Dr. Zsebo and nine months for Mr. Cleveland and Ms. Reed. If the named executive officer's termination without cause or resignation for good reason occurs within the three month period before or 12 month period following a change of control, as defined under the 2013 plan, the named executive officer will be eligible to receive (1) continued base salary payments and COBRA premium payments for 18 months for Dr. Zsebo and 12 months for Mr. Cleveland and Ms. Reed, (2) a lump sum payment equal to the named executive officer's target bonus for the year of termination and (3) full vesting acceleration of all outstanding equity awards that are subject to time-based vesting. All severance benefits under the letter agreements are contingent upon the named executive officer executing an effective release and waiver of claims against us.

For purposes of each of the named executive officer's employment letter agreements, "cause" generally means the executive's conviction of any felony or conviction of any crime involving fraud or dishonesty; (2) executive's participation in any material fraud, material act of dishonesty or other material act of misconduct against us; (3) executive's willful and habitual neglect of executive's duties, provided executive has been given written notice of such neglect and, if curable, a reasonable opportunity to cure, not to exceed thirty (30) days; (4) executive's material violation of any fiduciary duty or duty of loyalty owed to us; (5) executive's breach of any material term of any material contract between executive and us which has a material adverse effect on us; (6) executive's knowing violation of any material policy we have in effect which has a material adverse effect on us; or (7) executive's knowing violation of state or federal law in connection with the performance of executive's job which has a material adverse effect on us. For purposes of each of the named executive officer's letter agreements, "good reason" generally means the following events, conditions or actions taken by us with respect to the executive without cause and without the executive's express written consent: (1) a material reduction in base salary; (2) a material reduction in the executive is required to report; or (4) a relocation of the executive's principal place of employment to a place that increases the executive's one-way commute by more than 50 miles.

Each of our named executive officers holds stock options under our equity incentive plans that were granted subject to our form of stock option agreements. A description of the termination and change of control provisions in such equity incentive plans and stock options granted thereunder is provided below under "—Equity Benefit Plans" and the specific vesting terms of each named executive officer's stock options are described below under "—Outstanding Equity Awards at Fiscal Year-End."

2015 Compensation Changes

Our Board of Directors, upon the recommendation of our Compensation Committee, approved the following changes to the annual base salaries for our named executive officers, effective January 1, 2015: \$509,850 for Dr. Zsebo, \$359,257 for Mr. Cleveland, and \$280,500 for Ms. Reed. For 2015, the target bonus percentages for our named executive officers remain unchanged from 2014 levels.

In addition, our Board of Directors, upon the recommendation of our Compensation Committee, established five sets of corporate goals for 2015. The first set of goals, weighted at 30% towards overall corporate goal achievement, consists of clinical and biostatistics associated goals relating to our CUPID 2 trial for MYDICAR and additional clinical trials that we may initiate during 2015. The second set of goals, weighted at 25% towards overall corporate goal achievement, consists of manufacturing related goals for MYDICAR. The third set of corporate goals, weighted at 25% towards overall corporate goal achievement, consists of goals relating to

additional development matters. The fourth set of goals, weighted at 10% towards overall corporate goal achievement, consists of goals related to the development of our companion diagnostic for MYDICAR. The final set of goals, weighted at 10% towards overall corporate goal achievement, consists of corporate and financial related goals. No specific individual goals have been established for any of our named executive officers for 2015.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information regarding equity awards granted to our named executive officers that remain outstanding as of December 31, 2014.

| Grant Date | Number of securities underlying unexercised options (#) exercisable | Option Awards (1) Number of securities underlying unexercised options (#) unexercisable | Option exercise price (\$) (2) | Option expiration date |
|-----------------------|---|--|---|---|
| 12/2/2005 | 156 | | 137.39 | 12/2/2015 |
| 7/25/2006 | 659 | | 212.33 | 7/25/2016 |
| 7/3/2007 | 187 | — | 224.82 | 7/3/2017 |
| 11/13/2007 | 227 | — | 224.82 | 11/13/2017 |
| 5/6/2008 | 276 | _ | 224.82 | 5/6/2018 |
| 3/10/2009 | 128 | _ | 224.82 | 3/10/2019 |
| 1/14/2010 | 128(3) | _ | 224.82 | 1/14/2020 |
| 6/10/2010 | 270(4) | _ | 349.72 | 6/10/2020 |
| 6/15/2012 | 419,781(5) | _ | 1.12 | 6/14/2022 |
| 1/29/2014 | _ | 134,000 (6) | 8.00 | 1/28/2024 |
| 6/19/2014 | _ | 277,500 (7) | 14.40 | 6/18/2024 |
| 3/17/2014 6/9/2014 | 1,145(8) — (9) | 4,355(8) 65,000 (9) | 14.19 9.12 | 3/16/2024 6/8/2024 |
| | 12/2/2005 7/25/2006 7/3/2007 11/13/2007 5/6/2008 3/10/2009 1/14/2010 6/10/2010 6/15/2012 1/29/2014 6/19/2014 3/17/2014 | Number of securities underlying unexercised options (#) exercisable 12/2/2005 156 12/2/2005 156 7/25/2006 659 7/3/2007 187 11/13/2007 227 5/6/2008 276 3/10/2009 128 1/1/4/2010 128(3) 6/10/2010 270(4) 6/15/2012 419,781(5) 1/29/2014 — 6/19/2014 — 3/17/2014 1,145(8) | securities underlying unexercised options (#) exercisable securities underlying unexercisable Grant Date unexercisable 12/2/2005 156 12/2/2005 156 7/25/2006 659 7/3/2007 187 7/3/2007 187 11/13/2007 227 5/6/2008 276 3/10/2009 128 11/14/2010 128(3) 6/10/2010 270(4) 6/15/2012 419,781(5) 1/29/2014 — 1/29/2014 — 6/19/2014 277,500 (7) 3/17/2014 1,145(8) | Number of securities underlying unexercised options (#) Number of securities underlying options (#) Option exercised options (#) Grant Date exercisable exercisable unexercised options (#) options (#) 12/2/2005 156 137.39 7/25/2006 659 224.82 11/13/2007 227 224.82 5/6/2008 276 224.82 3/10/2009 128 224.82 1/1/4/2010 128(3) 224.82 6/10/2010 270(4) 349.72 6/15/2012 419,781(5) 1.12 1/29/2014 134,000 (6) 8.00 6/19/2014 277,500 (7) 14.40 3/17/2014 1,145(8) 4,355(8) 14.19 |

- (1) All of the option awards granted in 2014 were granted under the 2013 plan, the options granted in 2012 were granted under the 2012 plan and all of the option awards granted prior to 2012 were granted under the 2001 plan, the terms of which plans are described below under "—Equity Benefit Plans." Except as otherwise indicated, each option award under the 2012 and 2001 plans is fully exercisable on the date of grant subject to our right to repurchase any exercised shares prior to the vesting date for such shares and all vesting is subject to the executive's continuous service to us through the vesting dates. The share amounts and exercise prices presented give effect to the 1-for-100 reverse split of our common stock that occurred in January 2012 and the 1-for-12.49 reverse stock split of our common stock effected on October 25, 2013.
- (2) All of the option awards were granted with a per share exercise price equal to the fair market value of one share of our common stock on the date of grant. Prior to our initial public offering, fair market value was determined in good faith by our Board of Directors, often with the assistance of a third-part valuation expert. Stock options granted after our initial public offering are granted with an exercise price equivalent to the closing price of our common stock on NASDAQ on the date of grant.
- (3) 25% of the shares subject to the option vested on the one year anniversary of the March 10, 2009 vesting commencement date and 1/48th of the shares subject to the option vest in equal monthly installments thereafter over the next three years.
- (4) 1/48th of the shares vested each month after the April 27, 2010 vesting commencement date.
- (5) 25% of the shares subject to the option vested on the one year anniversary of the January 27, 2012 vesting commencement date and 1/48th of the shares subject to the option vest in equal monthly installments thereafter over the next three years.
- (6) 25% of the shares subject to the option vest on the one year anniversary of the January 29, 2014 vesting commencement date and 1/48th of the shares subject to the option vest in equal monthly installments thereafter over the next three years.

- (7) 25% of the shares subject to the option vest on the one year anniversary of the June 19, 2014 vesting commencement date and 1/48th of the shares subject to the option vest in equal monthly installments thereafter over the next three years.
- (8) 1/48th of the shares subject to the option vested on the one month anniversary of the February 25, 2014 vesting commencement date and 1/48th of the shares subject to the option vest in equal monthly installments thereafter such that the option will be fully vested four years after the vesting commencement date.
- (9) 25% of the shares subject to the option shall vest on the one year anniversary of the June 9, 2014 vesting commencement date and 1/48th of the shares subject to the option vest in equal monthly installments thereafter over the next three years.

Option Repricings

We did not engage in any repricings or other modifications or cancellations to any of our named executive officers' outstanding equity awards during the year ended December 31, 2014.

Perquisites, Health, Welfare and Retirement Benefits

All of our named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, life, disability and accidental death and dismemberment insurance plans, in each case on the same basis as all of our other employees. We pay the premiums for the life, disability, accidental death and dismemberment insurance for all of our employees, including our named executive officers. In addition, we provide each of our employees, including our named executive officers, with \$100 cash each month to supplement our life insurance plan and we provide our named executive officers the ability to participate, on the same basis as all of our employees, in a heath reimbursement arrangement under Section 105 of the Internal Revenue Code of 1986, as amended (the "Code"). We provide a 401(k) plan to our employees, including our named executive officers, as discussed in the section below entitled "—401(k) Plan."

We do not provide perquisites or personal benefits to our named executive officers, except for the commuting expenses paid by us on behalf of or directly to Dr. Zsebo. None of our named executive officers participate in or have account balances in qualified or nonqualified defined benefit plans sponsored by us. Our Board of Directors may elect to adopt qualified or nonqualified benefit plans in the future if it determines that doing so is in our best interests.

401(k) Plan

We maintain a defined contribution employee retirement plan, or 401(k) plan, for our employees. Our named executive officers are also eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(k) of the Code. The plan provides that each participant may contribute up to the lesser of 75% of his or her eligible compensation or the statutory limit, which is \$17,500 for calendar year 2014. Participants that are 50 years or older can also make "catch-up" contributions, which in calendar year 2014 may be up to an additional \$5,500 above the statutory limit. We provide an automatic matching contribution as follows: a match of 200% on the first 3% of compensation contributed by a participant and a match of 100% on amounts above 3%, up to 4% of compensation contributed by a participant. We may also elect to provide for discretionary profit sharing contributions, but we did not provide any such contributions in 2014. In general, eligible compensation for purposes of the 401(k) plan includes an employee's earnings reportable on IRS Form W-2 subject to certain adjustments, limits and exclusions required under the Code. The 401(k) plan currently does not offer the ability to invest in our securities.

Nonqualified Deferred Compensation

None of our named executive officers participate in or have account balances in nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. Our Board of Directors

may elect to provide our officers and other employees with nonqualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

Equity Benefit Plans

2013 Equity Incentive Plan

Our Board of Directors adopted the 2013 plan in September 2013 and our stockholders approved the 2013 plan in October 2013, which became effective on January 29, 2014, the date of our final prospectus for our initial public offering. In October 2013, our Board of Directors approved an amendment to the 2013 plan, which our stockholders approved in November 2013. In January 2014, our Board of Directors again approved an amendment to the 2013 plan, which our stockholders approved in January 2014.

No person may be granted stock awards covering more than 3,000,000 shares of our common stock under our 2013 plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the fair market value on the date the stock award is granted. Additionally, no person may be granted in a calendar year a performance stock award covering more than 3,000,000 shares of our common stock or a performance cash award having a maximum value in excess of \$3,000,000. Such limitations are designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards will not be subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to any covered executive officer imposed by Section 162(m) of the Code.

Our Board of Directors, or a duly authorized committee thereof, has the authority to administer the 2013 plan. Our Board of Directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, and (2) determine the number of shares of common stock to be subject to such stock awards. Subject to the terms of the 2013 plan, our Board of Directors or the authorized committee, referred to herein as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2013 plan. Subject to the terms of our 2013 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

The plan administrator determines the term of stock options granted under the 2013 plan, up to a maximum of ten years. Unless the terms of an optionholder's stock option agreement provide otherwise, if an optionholder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. The option term may be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an optionholder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately upon the termination of the individual for cause. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a

broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an optionholder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

The 2013 plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to performance-based awards will so qualify, our Compensation Committee can structure such awards so that stock or cash will be issued or paid pursuant to such award only after the achievement of certain pre-established performance goals during a designated performance period.

The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2013 plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued upon the exercise of ISOs, (4) the class and maximum number of shares subject to stock awards that can be granted in a calendar year (as established under the 2013 plan pursuant to Section 162(m) of the Code) and (5) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our Board of Directors may deem appropriate; or
- make a payment equal to the excess of (1) the value of the property the participant would have received upon exercise of the stock award over
 (2) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2013 plan, a corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our consolidated assets, (2) a sale or other disposition of at least 90% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability in the event of a change of control. For example, certain of our employees may receive an award agreement that provides for vesting acceleration upon the individual's termination without cause or resignation for good reason (including a material reduction in the individual's base salary, duties, responsibilities or authority, or a material relocation of the individual's principal place of employment with us) in connection with a change of control. Under the 2013 plan, a change of control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (2) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; or (3) a consummated sale, lease or exclusive license or other disposition of all or substantially of our consolidated assets.

2012 Equity Incentive Plan

Our Board of Directors and our stockholders approved our 2012 plan, which became effective in January 2012, and was further amended by our Board of Directors and stockholders in October 2013. As of December 31, 2014, there were outstanding stock awards under our 2012 plan covering a total of 1,195,077 shares of our common stock.

No additional awards will be granted under the 2012 plan, and all awards granted under the 2012 plan that are repurchased, forfeited, expire or are cancelled will become available for grant under the 2013 plan in accordance with its terms.

The plan administrator has the authority to modify outstanding awards under our 2012 plan. Subject to the terms of our 2012 plan, the plan administrator has the authority to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the optionholder's death.

In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (a) the class and maximum number of shares reserved for issuance under the 2012 plan, (b) the class and maximum number of shares that may be issued upon the exercise of ISOs and (c) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Unless otherwise provided in a stock award agreement or other written agreement between us and a participant, in the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our Board of Directors may deem
 appropriate; or
- make a payment equal to the excess of (a) the value of the property the participant would have received upon exercise of the stock award over (b) the exercise price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2012 plan, a corporate transaction is generally defined as the consummation of (1) a sale or other disposition of all or substantially all of our consolidated assets, (2) a sale or other disposition of at least 90% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

2001 Stock Option Plan

Our Board of Directors and our stockholders approved our 2001 plan, which became effective in December 2001 and was subsequently amended most recently in March 2008. The 2001 plan terminated and no further awards were granted under the 2001 plan upon the effective date of the 2012 plan. As of December 31, 2014, there were outstanding stock awards under our 2001 plan covering a total of 5,484 shares of our common stock.

In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2001 plan, (2) the class and maximum number of shares that may be issued upon the exercise of ISOs, and (3) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock options.

In the event of certain change of control events, outstanding stock options may be assumed or substituted for substantially equivalent stock options by the surviving or acquiring corporation. If any surviving or acquiring corporation fails to assume or substitute such stock options, all outstanding stock options will terminate effective as of the date of the change of control. However, not all options will automatically terminate if the Board of Directors otherwise provides for such options in the event of a change of control triggered by the direct or indirect sale or exchange by our stockholders of more than 50% of our voting stock, where we are the surviving or continuing corporation and immediately after such sale or exchange less than 50% of the total combined voting power of our voting stock is held by another corporation or corporations that are members of an affiliated group. In addition, the plan administrator may provide for special vesting acceleration in an individual award agreement or in any other written agreement between a participant and us.

Under the 2001 plan, a change of control is generally defined as an ownership change event where our stockholders immediately before such event do not retain immediately thereafter, direct or indirect beneficial ownership of more than 50% of the total combined voting power of outstanding voting securities of us or the

corporation or other entity to which our assets were transferred, as applicable, in substantially the same proportions as their ownership of shares of our voting stock immediately before such event. An ownership change event is generally defined as (1) the sale or exchange by our stockholders of more than 50% of our voting stock, (2) a merger or consolation in which we are a party, (3) the sale, exchange or transfer or all or substantially all of our assets or (4) our liquidation or dissolution.

2013 Employee Stock Purchase Plan

Our Board of Directors adopted the 2013 Employee Stock Purchase Plan ("ESPP") in September 2013 and our stockholders approved the ESPP in October 2013. The ESPP became effective on January 29, 2014, the date of our final prospectus for our initial public offering. The purpose of the ESPP is to retain the services of new employees and secure the services of new and existing employees while providing incentives for such individuals to exert maximum efforts toward our success and that of our affiliates.

Our Board of Directors has delegated its authority to administer the ESPP to our Compensation Committee. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering may be terminated under certain circumstances.

Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock under the ESPP. Unless otherwise determined by our Board of Directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (1) 85% of the fair market value of a share of our common stock on the first date of an offering or (2) 85% of the fair market value of a share of our common stock on the date of purchase.

In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the Board of Directors will make appropriate adjustments to (1) the number of shares reserved under the ESPP, (2) the maximum number of shares by which the share reserve may increase automatically each year and (3) the number of shares and purchase price of all outstanding purchase rights.

In the event of certain significant corporate transactions, including the consummation of: (1) a sale of all our assets, (2) the sale or disposition of 90% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within ten business days prior to such corporate transaction, and such purchase rights will terminate immediately.

Director Compensation

The following table sets forth in summary form information concerning the compensation that we paid or awarded during the year ended December 31, 2014 to each of our non-employee directors:

| Fees Earned or Pain in Cash | Option Awards | |
|--------------------------------|---|--|
| (\$) | (\$) (2) | Total (\$) |
| 41,500 | 93,012 | 134,512 |
| 53,028 | 93,012 | 146,040 |
| 11,712 | 109,282 | 120,994 |
| 34,583 | 167,242 | 201,825 |
| 66,861 | 108,465 | 175,326 |
| 33,333 | 152,479 | 185,812 |
| 29,167 | 152,479 | 181,646 |
| — | | |
| — | _ | — |
| | Pain in Cash (5) 41,500 53,028 11,712 34,583 66,861 33,333 | Pain in Cash (\$) Awards (\$)(2) 41,500 93,012 53,028 93,012 11,712 109,282 34,583 167,242 66,861 108,465 33,333 152,479 |

- (1) Dr. Zsebo was an employee director during 2014 and did not earn any compensation in 2014 for her service on the Board of Directors. Her compensation as an employee is fully reflected in the "Summary Compensation Table" above.
- (2) Amounts listed represent the aggregate grant date fair value of option awards granted during 2014 computed in accordance with ASC 718. Assumptions used in the calculation of these amounts are included in Note 7 to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2014, filed with the SEC on March 31, 2015. These amounts do not reflect the actual economic value that will be realized by the non-employee director upon vesting of the stock options, the exercise of the stock options, or the sale of the common stock underlying such stock options. As of December 31, 2014, the aggregate number of shares outstanding under all options to purchase our common stock held by our non-employee directors were: Mr. Alton: 30,000; Mr. Cooper: 30,000, Dr. Funder: 30,000, Mr. Narachi: 40,000, Dr. Honig: 22,500, and Dr. Yang: 22,500.
 (3) Mr. Foley and Dr. Dalton did not stand for re-election at our 2014 annual meeting.
- (4) Dr. Kördel resigned from our Board of Directors in March 2014.

Our Board of Directors adopted a new compensation policy in September 2013 that became effective upon the execution and delivery of the underwriting agreement dated January 29, 2014 for our initial public offering and is applicable to all of our non-employee directors. This compensation policy provides that each such non-employee director will receive the following compensation for service on our Board of Directors:

- an annual cash retainer of \$30,000;
- an additional annual cash retainer of \$25,000 for service as chairman of our Board of Directors or at the chairman's election, an option to purchase 5,000 shares subject to the terms described below for an annual option grant;
- an additional annual cash retainer of \$7,500, \$5,000 and \$5,000 for service on our Audit Committee, Compensation Committee and the Nominating and Corporate Governance Committee, respectively;
- an additional annual cash retainer of \$10,000, \$7,500 and \$5,000 for service as chairman of the Audit Committee, Compensation Committee and the Nominating and Corporate Governance Committee, respectively;
- an automatic annual option grant to purchase 10,000 shares of our common stock for each non-employee director serving on the Board of Directors on the date of our annual stockholder meeting (including by reason of his or her election at such meeting), in each case vesting monthly until our next annual stockholder meeting subject to the director's continued service with us (the foregoing grants to non-employee directors joining our Board of Directors other than at an annual stockholder meeting will be prorated for the number of months remaining until our next annual stockholder meeting);



- upon first joining our Board of Directors, an automatic initial grant of an option to purchase 10,000 shares of our common stock that vests monthly over a three-year period following the grant date subject to the director's continued service with us; and
- on January 29, 2014, the date of the underwriting agreement for our initial public offering, an automatic option grant to purchase 20,000 shares of
 our common stock to each non-employee director serving on the Board of Directors on such date that will vest monthly over a three-year period
 following the grant date subject to the director's continued service with us; provided that Mr. Alton, Mr. Cooper and Mr. Narachi received grants
 of 6,415, 6,415 and 9,243 shares of common stock, respectively, in lieu of such grants.

In March 2014, the Board of Directors approved the establishment of a Research & Development Committee, and approved cash compensation for the non-employee directors serving on the Research & Development Committee. Each non-employee director serving on the Research & Development Committee will receive an additional cash retainer of \$5,000, and the chairman of the Research & Development Committee will receive an additional annual cash retainer of \$5,000 for service as chairman.

Each of the option grants described above will vest and become exercisable subject to the director's continuous service with us, provided that each option will vest in full upon a change of control, as defined under our 2013 plan. In addition, the post-termination exercise period for each of the option grants described above will be three years from the date of termination of service, if such termination of service is other than for cause subject to the ten-year term of each option. The options will be granted under our 2013 plan, the terms of which are described in more detail above under "—Equity Benefit Plans—2013 Equity Incentive Plan." Drs. Dalton and Kördel waived their right to receive any director compensation.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

RELATED-PERSON TRANSACTIONS POLICY AND PROCEDURES

We have adopted a written related-person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration and oversight of "related-person transactions." For purposes of our policy only, a "related-person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any "related person" are participants involving an amount that exceeds \$120,000.

Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related-person transactions under this policy. A related person is any executive officer, director or a holder of more than 5% of our common stock, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to our Audit Committee (or, where review by our Audit Committee would be inappropriate, to another independent body of our Board of Directors) for review. The presentation must include a description of, among other things, the material facts, the direct and indirect interests of the related persons, the benefits of the transaction to us and whether any alternative transactions are available. To identify related-person transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related-person transactions, our Audit Committee or another independent body of our Board of Directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from our employees generally.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval.

CERTAIN RELATED-PERSON TRANSACTIONS

The following includes a summary of transactions since January 1, 2014 to which we have been a party, in which the amount involved in the transaction exceeded the lesser of \$120,000 or one percent of the average of the Company's total assets at year end for the last two completed fiscal years. Since January 1, 2014, the Company has engaged in the following transactions with related persons:

Convertible Note and Warrant Financing

In October 2013, we entered into a convertible note and warrant purchase agreement with each of our greater than 5% stockholders, including entities affiliated with certain members of our board of directors, pursuant to which we issued \$1,097,017 aggregate principal amount of convertible notes (the "2013 notes"), and warrants exercisable for shares of our Series A-1 preferred stock (the "2013 warrants"). The 2013 notes accrued interest at a rate of 6% per annum, compounded annually, and were converted into an aggregate of 139,644 shares of our common stock in February 2014 in connection with the closing of our initial public offering at a conversion price of \$8.00 per share (the purchase price to the public in our initial public offering).

The 2013 warrants were originally exercisable for an aggregate of 2,895,570 shares of Series A-1 preferred stock at an exercise price of \$0.449 per share. In connection with the completion of our initial public offering, the 2013 warrants became exercisable for an aggregate of 231,821 shares of our common stock, at an exercise price of approximately \$5.61 per share. In May 2014, we issued 25,481 shares of our common stock to Novartis International Pharmaceutical Investment Ltd pursuant to the exercise of a 2013 warrant for approximately \$0.1 million in cash. The 2013 warrants will expire in October 2018.

The following table sets forth the aggregate amount of securities acquired by the listed holders of more than 5% of our capital stock, or their affiliates, in the convertible note and warrant financing.

| Participants | Aggregate Principal Amount of 2013 Notes (dollars in thousands) | Shares of Series A-1 Preferred Stock Underlying 2013 Warrants |
|---|--|---|
| Coöperatief LSP IV UA | 81 | 198,916 |
| Enterprise Partners and affiliated entities (1) | 106 | 260,859 |
| Johnson & Johnson Development Corporation | 43 | _ |
| GBS Bioventures IV | 182 | 672,060 |
| H&Q Healthcare Investors and affiliated entities (2) | 81 | 199,055 |
| Lundbeckfond Invest A/S | 146 | 358,049 |
| MPM Capital and affiliated entities (3) | 89 | 218,806 |
| Novartis Bioventures Ltd. and affiliated entities (4) | 130 | 318,266 |
| Pfizer Inc. | 182 | 532,818 |
| Venrock Partners and affiliated entities (5) | 56 | 136,741 |

- (1) Consists of \$43,752.19 principal amount of 2013 notes and 2013 warrants to purchase 107,187 shares of Series A-1 preferred stock issued to Enterprise Partners V, L.P.; \$43,752.19 principal amount of 2013 notes and 2013 warrants to purchase 107,187 shares of Series A-1 preferred stock issued to Enterprise Partners VI, L.P.; and \$18,974.54 principal amount of 2013 notes and 2013 warrants to purchase 46,485 shares of Series A-1 preferred stock issued to Enterprise Partners VI, L.P.; and \$18,974.54 principal amount of 2013 notes and 2013 warrants to purchase 46,485 shares of Series A-1 preferred stock issued to Enterprise Partners Management, LLC.
- (2) Consists of \$56,062.96 principal amount of 2013 notes and 2013 warrants to purchase 137,348 shares of Series A-1 preferred stock issued to H & Q Healthcare Investors and \$25,187.70 principal amount of 2013 notes and 2013 warrants to purchase 61,707 shares of Series A-1 preferred stock issued to H & Q Life Sciences Investors.
- (3) Consists of \$83,708.25 principal amount of 2013 notes and 2013 warrants to purchase 205,075 shares of Series A-1 preferred stock issued to MPM BioVentures IV-QP, L.P.; \$3,224.93 principal amount of 2013 notes and 2013 warrants to purchase 7,900 shares of Series A-1 preferred stock issued to MPM BioVentures IV GmbH & Co. Beteiligungs KG; and \$2,380.30 principal amount of 2013 notes and 2013 warrants to purchase 5,831 shares of Series A-1 preferred stock issued to MPM Asset Management Investors BV4 LLC.
- (4) Consists of \$129,910.51 principal amount of 2013 notes and 2013 warrants to purchase 318,266 shares of Series A-1 preferred stock issued to Novartis International Pharmaceutical Investment Ltd.
- (5) Consists of \$9,265.45 principal amount of 2013 notes and 2013 warrants to purchase 22,699 shares of Series A-1 preferred stock issued to Venrock Partners, L.P.; \$45,434.20 principal amount of 2013 notes and 2013 warrants to purchase 111,308 shares of Series A-1 preferred stock issued to Venrock Associates IV, L.P.; and \$1,116.30 principal amount of 2013 notes and 2013 warrants to purchase 2,734 shares of Series A-1 preferred stock issued to Venrock Entrepreneurs Fund IV, L.P.

Below is a summary of certain information relating to such notes as of and for the year ended December 31, 2014:

| December 31, 2014 (in thousands) |
|--|
| \$ — |
| 1,097 |
| _ |
| _ |
| (1,117) |
| |

License Agreement with Enterprise Partners

In July 2014, we and Enterprise Partners Management, LLC ("Enterprise") entered into an Assignment and License Agreement, pursuant to which Enterprise granted to us an exclusive, worldwide license and the assignment of patents held by Enterprise relating to certain gene therapy applications of mSCF for the treatment of cardiac ischemia. We have the right to grant sublicenses to third parties under the agreement.

In consideration for the rights granted to us under the agreement, we paid an upfront fee to Enterprise of \$160,000. We are also obligated to pay to Enterprise a milestone payment in the amount of \$1,000,000 upon the grant to us, or an affiliate or sublicensee of ours, of the first regulatory approval in the United States of a product that is covered by the licensed patents. In addition, we are required to pay to Enterprise a 2% royalty on net sales of products sold by us or by our affiliates or sublicensees that are covered by the licensed patents. Our royalty obligations continue on a product-by-product and country-by-country basis until the expiration of the last-to-expire valid claim in the licensed patents covering a licensed product in such country.

Participation in our Initial Public Offering

In January 2014, certain of our existing stockholders, officers and directors purchased an aggregate of 1,453,651 shares of our common stock in our initial public offering at a price of \$8.00 per share, or \$11.6 million in the aggregate.

| Purchaser | Initial Public Offering Shares |
|-------------------------------------|--------------------------------|
| Pfizer, Inc. | 227,261 |
| H&Q Healthcare Investors | 70,072 |
| H&Q Life Sciences Investors | 31,485 |
| GBS Bioventure IV | 227,261 |
| MPM BioVentures IV-QP, LP | 104,603 |
| MPM BioVentures IV BMBH & Co | 4,030 |
| MPM Asset Management Investors | 2,975 |
| Lundbeckfond Invest A/S | 182,681 |
| Cooperatief LSP IV UA | 101,488 |
| Novartis Bioventures Ltd. | 162,386 |
| Enterprise Liquidating Trust V | 57,229 |
| Enterprise Liquidating Trust VI | 57,229 |
| Enterprise Partners Management | 18,625 |
| Venrock Partners, L.P. | 11,574 |
| Venrock Associates IV, L.P. | 56,784 |
| Venrock Entrepreneurs Fund IV, L.P. | 1,385 |
| Johnson & Johnson Development Corp | 54,083 |
| Michael Narachi | 62,500 |
| B. Fredrik Wiklund | 20,000 |
| | |

Participation in Follow-on Offering

In August 2014, we conducted a follow-on public offering in which GBS Venture Partners participated by purchasing 146,800 shares of our common stock at the public offering price of \$9.50 per share, or \$1.4 million in the aggregate.

Certain of our current and former directors have affiliations with the investors that participated in the convertible note and warrant financing, initial public offering and August 2014 follow-on offering described above, as indicated in the table below:

| Director | Principal Stockholder |
|--------------------------|---|
| Fouad Azzam, Ph.D.* | Coöperatief LSP IV UA |
| Barbara Dalton, Ph.D.* | Pfizer Inc. |
| Todd Foley* | MPM Capital and affiliated entities |
| Joshua Funder, Ph.D. | GBS Bioventures IV and affiliated entities |
| Johan Kördel, Ph.D.* | Lundbeckfond Invest A/S |
| Daniel Omstead, Ph.D.* | H&Q Healthcare Investors and affiliated entities |
| Andrew E. Senyei, M.D.* | Enterprise Partners V, L.P. and affiliated entities |
| Lauren Silverman, Ph.D.* | Novartis Bioventures Ltd. and affiliated entities |
| | |

*FormerDirector

Investor Agreements

In connection with our preferred stock financings, we entered into amended and restated investor rights, voting and right of first refusal and co-sale agreements containing voting rights, information rights, rights of first refusal and registration rights, among other things, with certain holders of our preferred stock and certain holders of our common stock, including all of the holders of more than 5% of our capital stock or entities affiliated with them. These stockholder agreements terminated upon the closing of our initial public offering, except for the amended and restated investor rights agreement which terminates seven years after the closing of our initial public offering, and contains certain registration rights as more fully described in our final prospectus for our initial public offering filed with the SEC on January 30, 2014 under the heading "Description of Capital Stock—Registration Rights."

Employment Arrangements

We currently have written employment agreements with our executive officers. For information about our employment agreements with our named executive officers, refer to "Executive Compensation—Agreements with our Named Executive Officers."

Stock Options Granted to Executive Officers and Directors

We have granted stock options to our executive officers and directors, as more fully described in "Executive Compensation—Outstanding Equity Awards at Fiscal Year-End."

Indemnification Agreements

We have entered, and intend to continue to enter, into separate indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our amended and restated bylaws. These agreements, among other things, require us to indemnify our directors and executive officers for certain expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of their services as one of our directors or executive

officers or as a director or executive officer of any other company or enterprise to which the person provides services at our request. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may decline in value to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for annual meeting materials with respect to two or more stockholders sharing the same address by delivering a single set of annual meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Celladon stockholders will be "householding" the Company's proxy materials. A single set of annual meeting materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications 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 set of annual meeting materials, please notify your broker or Celladon. Direct your written request to Celladon Corporation, Fredrik Wiklund, Vice President, Corporate Development and Investor Relations, 11988 El Camino Real, Suite 650, San Diego, California 92130 or contact Mr. Wiklund at (858) 432-7215. Stockholders who currently receive multiple copies of the annual meeting materials at their addresses and would like to request "householding" of their communications should contact their brokers.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors

/s/ Elizabeth E. Reed Secretary

April 30, 2015

A copy of the Company's Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2014 is available without charge upon written request to: Corporate Secretary, Celladon Corporation, 11988 El Camino Real, Suite 650, San Diego, California 92130.

ANNUAL MEETING OF STOCKHOLDERS OF

CELLADON CORPORATION

June 4, 2015

PROXY VOTING INSTRUCTIONS

INTERNET - Access "www.voteproxy.com" and follow the on-screen instructions or scan the QR code with your smartphone. Have your proxy card available when you access the web page. TELEPHONE - Call toll-free 1-800-PROXIES (1-800-776-9437) in the United States or 1-718-921-8500 from foreign countries from any touch-tone telephone and follow the instructions. Have your proxy card available when you call. **COMPANY NUMBER** Vote online/phone until 11:59 PM EST the day before the meeting. MAIL - Sign, date and mail your proxy card in the envelope provided as soon as possible. ACCOUNT NUMBER **IN PERSON** - You may vote your shares in person by attending the Annual Meeting. GO GREEN - e-Consent makes it easy to go paperless. With e-Consent, you can quickly access your proxy material, statements and other eligible documents online, while reducing costs, clutter and paper waste. Enroll today via www.amstock.com to enjoy online access. NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL: The Notice of Meeting, proxy statement and proxy card are available at http://www.astproxyportal.com/ast/18634 i Please detach along perforated line and mail in the envelope provided IF you are not voting via telephone or the Internet. i 100300000000000000000 ¢ 3 060415 THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR THE NOMINEE" IN THE ELECTION OF DIRECTORS AND "FOR" PROPOSAL 2. PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE 🛛 AGAINST ABSTAIN FOR To ratify the selection of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2015. Election of one Class II director: 2. 3. To transact such other business as may properly come before the meeting or any adjournments or NOMINEE: postponements thereof Michael Narachi FOR THE NOMINEE In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted as directed herein by the undersigned Stockholder. If no direction is made, this proxy will be voted "FOR THE NOMINEE" in Proposal 1 and "FOR" Proposal 2. WITHHOLD AUTHORITY FOR THE NOMINEE To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method Signature of Stockholder Signature of Stockholder Date: Date:

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.

ANNUAL MEETING OF STOCKHOLDERS OF

CELLADON CORPORATION

June 4, 2015

GO GREEN

e-Consent makes it easy to go paperless. With e-Consent, you can quickly access your proxy material, statements and other eligible documents online, while reducing costs, clutter and paper waste. Enroll today via www.amstock.com to enjoy online access.

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The Notice of Meeting, proxy statement and proxy card are available at http://www.astproxyportal.com/ast/18634

Please sign, date and mail your proxy card in the envelope provided as soon as possible.

i Please detach along perforated line and mail in the envelope provided. i

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| THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR THE NOMINEE" IN THE ELECTION OF DIRECTORS AND "FOR" PROPOSAL 2. PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE 🛛 | | |
| 1. Election of one Class II director: | FOR AGAINST ABSTAIN 2. To ratify the selection of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2015. | |
| NOMINEE: FOR THE NOMINEE Michael Narachi WITHHOLD AUTHORITY FOR THE NOMINEE | 3. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof. | |
| | In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted as directed herein by the undersigned Stockholder. If no direction is made, this proxy will be voted "FOR ALL NOMINEE" in Proposal 1 and "FOR" Proposal 2. | |
| | | |
| To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method. | | |
| Signature of Stockholder Date: | Signature of Stockholder Date: | |

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.

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PROXY SOLICITED BY THE BOARD OF DIRECTORS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 4, 2015

CELLADON CORPORATION

The undersigned hereby appoint(s) Krisztina M. Zsebo, Ph.D. and Paul B. Cleveland, and each of them, as proxies for the undersigned, with full power of substitution and revocation, to vote all of the shares of stock of Celladon Corporation that the undersigned may be entitled to vote at the Annual Meeting of Stockholders of Celladon Corporation to be held at the offices of Cooley LLP located at 4401 Eastgate Mall, San Diego, California 92121 on Thursday, June 4, 2015 at 9:00 a.m. (local time), and at any and all postponements and adjournments thereof, with all powers that the undersigned would possess if personally present, on the following matters and in accordance with the following instructions, with discretionary authority as to any other business that may properly come before the meeting.

This proxy, when properly executed and returned, will be voted in the manner directed herein. If no direction is indicated, this proxy will be voted FOR the nominee listed in Proposal 1 and FOR Proposal 2, as more specifically described in the proxy statement, and in the discretion of the proxy holders upon any other business as may properly come before the Annual Meeting of Stockholders or any adjournment or postponement thereof.

(Continued and to be signed on the reverse side.)

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