SCHEDULE 14A INFORMATION

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

Filed by the Registrant 🗷

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

AcelRx Pharmaceuticals, Inc.

(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.
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 - 6. Amount Previously Paid:
 - 7. Form, Schedule or Registration Statement No .:
 - 8. Filing Party:
 - 9. Date Filed:

ACELRX PHARMACEUTICALS, INC. 351 Galveston Drive Redwood City, CA 94063 650-216-3500

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 23, 2015

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of **ACELRX PHARMACEUTICALS**, **INC.**, a Delaware corporation (the "Company"). The meeting will be held on Tuesday, June 23, 2015 at 12:00 p.m. local time at our principal office located at 351 Galveston Drive, Redwood City, California 94063 for the following purposes:

- 1. To elect the Board's three nominees for director, 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 27, 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 Tuesday, June 23, 2015 at 12:00 p.m. local time at our principal office located at 351 Galveston Drive, Redwood City, California 94063.

The proxy statement, notice and annual report to stockholders are available at <u>www.proxyvote.com</u>.

By Order of the Board of Directors

/s/ Adrian Adams

Adrian Adams Chairman

Redwood City, 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 proxy mailed to you, 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.

TABLE OF CONTENTS

	Page
QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING	1
PROPOSAL NO. 1: ELECTION OF DIRECTORS	5
PROPOSAL NO. 2: RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	7
INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE	9
Independence of the Board of Directors	9
Board Leadership Structure	9
Role of the Board in Risk Oversight	9
Meetings of the Board of Directors	9
Annual Meeting Attendance	9
Information Regarding Committees of the Board of Directors	9
Compensation Committee Interlocks and Insider Participation	12
Stockholder Communications with the Board of Directors	12
Code of Business Conduct and Ethics	12
REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS	13
EXECUTIVE OFFICERS OF THE REGISTRANT	14
EXECUTIVE COMPENSATION	15
Compensation Discussion and Analysis	15
Compensation Committee Report	23
Summary Compensation Table	23
Grants of Plan Based Awards in Fiscal 2014	24
Outstanding Equity Awards at December 31, 2014	25
Option Exercises and Stock Vested	26
Potential Payments Upon Termination or Change of Control for each Named Executive Officer	27
Director Compensation	28
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	30
Section 16(a) Beneficial Ownership Reporting Compliance	32
Equity Compensation Plan Information	33
CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS	34
Policies and Procedures for Review of Related Party Transactions	34
Certain Transactions With or Involving Related Persons	34
Indemnification Agreements	34
Other Transactions	34
STOCKHOLDER PROPOSALS FOR 2016 ANNUAL MEETING	35
HOUSEHOLDING OF PROXY MATERIALS	35
OTHER MATTERS	36

ACELRX PHARMACEUTICALS, INC. 351 Galveston Drive Redwood City, CA 94063

PROXY STATEMENT FOR THE 2015 ANNUAL MEETING OF STOCKHOLDERS

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive a notice regarding the availability of proxy materials on the internet?

Pursuant to rules adopted by the Securities and Exchange Commission (the "SEC"), we have elected to provide access to our proxy materials over the internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials (the "Notice") because the Board of Directors of AcelRx Pharmaceuticals, Inc. (sometimes referred to as the "Company" or "AcelRx") is soliciting your proxy to vote at the 2015 Annual Meeting of Stockholders, including at any adjournments or postponements of the meeting. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the internet or to request a printed copy may be found in the Notice.

We intend to mail the Notice on or about May 12, 2015 to all shareholders of record entitled to vote at the Annual Meeting.

Will I receive any other proxy materials by mail?

We may send you a proxy card, along with a second Notice, on or after May 22, 2015.

How do I attend the Annual Meeting?

The meeting will be held on Tuesday, June 23, 2015 at 12:00 p.m. local time at 351 Galveston Drive Redwood City, CA 94063. Directions to the Annual Meeting may be found at *www.acelrx.com*. 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 27, 2015 will be entitled to vote at the Annual Meeting. On this record date, there were 44,335,196 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on April 27, 2015 your shares were registered directly in your name with our transfer agent, Computershare Trust Company, N.A., 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 to ensure your vote is counted.

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

If on April 27, 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 the Notice is 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:

- Election of three directors (Proposal 1); and
- Ratification of selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as independent registered public accounting firm of the Company for its fiscal year ending December 31, 2015 (Proposal 2).

What are the Board's voting recommendations?

The Board of Directors recommends that you vote your shares:

- "For" each of the nominees named below for director to hold office until the 2018 annual meeting of stockholders (Proposal 1).
- "For" the ratification of selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as independent registered public accounting firm of the Company for its fiscal year ending December 31, 2015 (Proposal 2).

What if another matter is properly brought before the Annual 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 Annual 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 fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a shareholder of record, you may vote in person at the Annual Meeting or vote by proxy over the telephone, or vote by proxy through the internet or vote by proxy using a proxy card that you may request or that we may elect to deliver at a later time. 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 proxy card that may be delivered 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 1-800-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice. Your vote must be received by 11:59 p.m., Pacific Time on June 22, 2015 to be counted.
- To vote through the internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the company number and control number from the Notice. Your vote must be received by 11:59 p.m., Pacific Time on June 22, 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 Notice containing voting instruction from that organization rather than from AceIRx. Simply follow the voting instructions in the Notice to ensure that your vote is counted. 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 27, 2015.

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

Shareholder of Record: Shares Registered in Your Name

If you are a stockholder of record and you indicate when voting on the internet or by telephone that you wish to vote as recommended by the board of directors, which recommendations are set forth under "*What are the board's voting recommendations*?" above, or if you sign and return a proxy card without giving specific voting instructions, then the proxy holders will vote your shares in the manner recommended by the Board of Directors on all matters presented in this proxy statement and as the proxy holders may determine in their discretion with respect to any other matters properly presented for a vote at the Annual Meeting.

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

If you are a beneficial owner of shares held in "street name" and you do not provide the organization that holds your shares with specific instructions, under the rules of various national and regional securities exchanges, the organization that holds your shares may generally vote on routine matters but cannot vote on non-routine matters. If the organization that holds your shares does not receive instructions from you on how to vote your shares on a non-routine matter, the organization that holds your shares will inform our inspector of elections that it does not have the authority to vote on this matter with respect to your shares. This is generally referred to as a "broker non-vote." When our inspector of elections tabulates the votes for any particular matter, broker non-votes will be counted for purposes of determining whether a quorum is present, but will not be counted toward the vote total for any proposal. We encourage you to provide voting instructions to the organization that holds your shares to ensure that your vote is counted on both proposals.

Which proposals are considered "routine" or "non-routine"?

The ratification of selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as independent registered public accounting firm of the Company for its fiscal year ending December 31, 2015 (Proposal 2) is a matter considered routine under applicable rules. A broker or other nominee may generally vote on routine matters, and therefore no broker non-votes are expected on Proposal 2.

The election of directors (Proposal 1) is considered a non-routine matter under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore we expect broker non-votes on Proposal 1.

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 Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the Notices 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 Annual 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 AcelRx's Secretary at 351 Galveston Drive, Redwood City, CA 94063.
- You may attend the Annual Meeting and vote in person. Simply attending the Annual 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.

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 directors, votes "For," "Withhold" and broker non-votes and, with respect to the other proposal, votes "For" and "Against" and abstentions. Broker non-votes have no effect and will not be counted towards the vote total for the proposal to elect directors.

What are "broker non-votes"?

Broker non-votes occur 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 "non-routine." Generally, if shares are held in street name, the beneficial owner of the shares is entitled to give voting instructions to the broker or nominee holding the shares. If the beneficial owner does not provide voting instructions, the broker or nominee can still vote the shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the New York Stock Exchange ("NYSE"), "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) and executive compensation, including the advisory stockholders vote on executive compensation. Of the two proposals, only Proposal No. 2, the ratification of the selection by the Audit Committee of the Board of Directors of Ernst & Young LLP as the independent auditors of AcelRx for its fiscal year ending December 31, 2015, is a "routine" matter; the election of directors proposal is "non-routine."

How many votes are needed to approve each proposal?

- Proposal No. 1: For the election of directors, the three nominees 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.
- Proposal No. 2: Ratification of the selection by the Audit Committee of the Board of Directors 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 by proxy and entitled to vote. If you "Abstain" from voting, it will have the same effect as an "Against" vote.

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 44,335,196 shares outstanding and entitled to vote. Thus, the holders of 22,167,598 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 vote 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.



PROPOSAL 1

ELECTION OF DIRECTORS

CLASSIFIED BOARD

Our Board of Directors is divided into three classes. Two classes consist of two directors and one class consists of three directors. 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.

On March 31, 2015, Richard King, our former President and Chief Executive Officer resigned from the Board of Directors. Upon his departure, the size of our Board of Directors was reduced to, and our Board presently has, seven members. There are three directors in the class whose term of office expires in 2015. All of the nominees are current directors of the Company. One of the nominees listed below, Mark G. Edwards, was previously elected by the stockholders. Our Board of Directors appointed Mr. Adams and Dr. Afable to the Board of Directors in February 2013 and December 2013, respectively, upon recommendation of our nominating and corporate governance committee, based on its review of each of their experience and qualifications. If elected at the Annual Meeting, each of these nominees would serve until the 2018 Annual Meeting and until his or her 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 encourage 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. The three nominees 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 two nominees named below. If any 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 AcelRx. Each person nominated for election has agreed to serve if elected. The Company's management has no reason to believe that any nominee will be unable to serve.

The following is a brief biography of each nominee and each director whose term will continue after the Annual Meeting. The biographies below also include a discussion of the specific experience, qualifications, attributes or skills of each nominee that led the Nominating and Corporate Governance Committee and the Board to conclude, as of the date of this proxy statement, that each nominee for Class I director should continue to serve as a director.

CLASS I DIRECTORS FOR ELECTION FOR A THREE-YEAR TERM EXPIRING AT THE 2018 ANNUAL MEETING

Adrian Adams, age 64, has served as our Chairman since February 2013. Mr. Adams served as Chief Executive Officer and President of Auxilium Pharmaceuticals Inc., a specialty biopharmaceutical company, from December 2011 until January 2015, when it was acquired by Endo International plc. Prior to joining Auxilium, from September 2011 until November 2011, Mr. Adams served as Chairman and Chief Executive Officer of Neurologix, a company focused on development of multiple innovative gene therapy development programs. Before Neurologix, Mr. Adams served as President and Chief Executive Officer of Inspire Pharmaceuticals, Inc., where he oversaw the commercialization and development of prescription pharmaceutical products and led the company through a strategic acquisition by global pharmaceutical leader Merck & Co., Inc. in May 2011. Prior to Inspire, Mr. Adams served as President and Chief Executive Officer of Sepracor Inc. from December 2006 until February 2010, when it was acquired by Dainippon Sumitomo Pharma Co. Prior to joining Sepracor, Mr. Adams was President and Chief Executive Officer of Kos Pharmaceuticals, Inc. from 2002 until the acquisition of the company by Abbott Laboratories in December 2006. Mr. Adams graduated from the Royal Institute of Chemistry at Salford University in the U.K. Mr. Adams has extensive national and international experience and has been instrumental in launching major global brands in addition to driving successful corporate development activities encapsulating financing, product and company acquisitions, in-licensing and company M&A activities, all of which provide him with the qualifications and skills to serve as a director.

Richard Afable, M.D., age 61, has served as our director since December 2013. Since February 2013, Dr. Afable has been the Chief Executive Officer of Covenant Health Network, based in Irvine, California, a non-profit healthcare delivery system formed through the affiliation of Hoag Memorial Hospital Presbyterian and St. Joseph Health System. Prior to Covenant Health Network, Dr. Afable served as the President and Chief Executive of Hoag Memorial Hospital Presbyterian from 2005 to 2013. Prior to Hoag Memorial Hospital Presbyterian, Dr. Afable served as the Chief Medical Officer of Catholic Health East from 1999 to 2005. He earned a B.S. in biology, an M.D. degree from Loyola University of Chicago, and a Masters in Public Health from the University of Illinois at Chicago. Dr. Afable's scientific, financial and business expertise, including his experience as an executive officer in the health care industry, provides him with the qualifications and skills to serve as a director.

5

Mark G. Edwards, age 57, has served as our director since September 2011. Mr. Edwards is Managing Director of Bioscience Advisors Inc., a biopharmaceutical consulting firm he founded in 2011. From July 2008 until December 2010, he was Managing Director and a Principal of Deloitte Recap LLC, a wholly-owned subsidiary of Deloitte Touche Tohmatsu, an audit and financial consulting services firm. Mr. Edwards was previously the Managing Director and founder of Recombinant Capital, Inc. (Recap), a consulting and database firm based in Walnut Creek, California, from 1988 until the sale of Recap to Deloitte in 2008. Prior to founding Recap in 1988, Mr. Edwards was Manager of Business Development at Chiron Corporation, a biotechnology company. He received his B.A. and M.B.A. degrees from Stanford University. Mr. Edwards' financial and business expertise, including his background as a business advisor to pharmaceutical and biotechnology companies, provides him with the qualifications and skills to serve as a director.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF EACH NAMED NOMINEE.

Set forth below is a brief biography of each continuing director composing the remainder of the Board with terms expiring as shown, including their ages, and information furnished by them as to principal occupations and public company directorships held by them. The biographies below also include a discussion of the specific experience, qualifications, attributes or skills of each continuing director that led the Nominating and Corporate Governance Committee and the Board to conclude, as of the date of this Proxy Statement, that the applicable director should continue to serve as a director.

CLASS II DIRECTORS CONTINUING IN OFFICE UNTIL THE 2016 ANNUAL MEETING

Stephen J. Hoffman, Ph.D., M.D., age 61, has served as our director since February 2010. Dr. Hoffman has been a Senior Advisor to PDL BioPharma, Inc. since February 2014. Prior to that, he served as a managing director at Skyline Ventures, a venture capital firm, from May 2007 until February 2014. From January 2003 to March 2007, Dr. Hoffman was a general partner at TVM Capital, a venture capital firm. Prior to that, he served as President, Chief Executive Officer and a director of Allos Therapeutics, a biopharmaceutical company, from 1994 to 2012; he served as Chairman of the Board from 2002 until its acquisition by Spectrum Pharmaceuticals in 2012. Dr. Hoffman holds a Ph.D. in bio-organic chemistry from Northwestern University and an M.D. from the University of Colorado School of Medicine. Dr. Hoffman's scientific, financial and business expertise, including his diversified background as an executive officer and investor in public pharmaceutical companies, provides him with the qualifications and skills to serve as a director.

Pamela P. Palmer, M.D., Ph.D., age 52, has served as our director and Chief Medical Officer since she co-founded the company in July 2005. Dr. Palmer has been on faculty at the University of California, San Francisco since 1996 and is currently a Clinical Professor of Anesthesia and Perioperative Care. Dr. Palmer was Director of UCSF PainCARE-Center for Advanced Research and Education from 2005 to 2009, and was Medical Director of the UCSF Pain Management Center from 1999 to 2005. Dr. Palmer has been a consultant of Omeros Corporation, a biopharmaceutical company, since she co-founded that company in 1994. Dr. Palmer holds an M.D. from Stanford University and a Ph.D. from the Stanford Department of Neuroscience. Dr. Palmer's extensive clinical and scientific experience in the treatment of acute and chronic pain as well as historical knowledge of our company provides her with the qualifications and skills to serve as a director.

CLASS III NOMINEES CONTINUING IN OFFICE UNTIL THE 2017 ANNUAL MEETING

Howard B. Rosen, age 57, has served as our interim Chief Executive Officer since April 1, 2015, and has served as our director since 2008. Since 2008, Mr. Rosen has served as a consultant to several companies in the biotechnology industry. He has also served as a lecturer at Stanford University in Chemical Engineering since 2008 and in Management since 2011. Mr. Rosen served as interim President and Chief Executive Officer of Pearl Therapeutics, Inc., a company focused on developing combination therapies for the treatment of highly prevalent chronic respiratory diseases, from June 2010 to March 2011. From 2004 to 2008, Mr. Rosen was Vice President of Commercial Strategy at Gilead Sciences, Inc., a biopharmaceutical company. Mr. Rosen was President of ALZA Corporation, a pharmaceutical and medical systems company that merged with Johnson & Johnson, a global healthcare company, in 2001, from 2003 until 2004. Prior to that, from 1994 until 2003, Mr. Rosen held various positions at ALZA Corporation. Mr. Rosen is chairman of the board of directors of Alcobra, Ltd., a public pharmaceutical company. Mr. Rosen is also a member of the board of directors of a number of private biotechnology companies as follows: PaxVax, Inc., Entrega, Inc., Kala Pharmaceuticals, Inc. and ALDEA Pharmaceuticals. Mr. Rosen holds a B.S. in Chemical Engineering from Stanford University, an M.S. in Chemical Engineering from the Massachusetts Institute of Technology and an M.B.A. from the Stanford Graduate School of Business. Mr. Rosen's experience in the biopharmaceutical industry, including his specific experience with commercialization of pharmaceutical products, provides him with the qualifications and skills to serve as a director.

Mark Wan, age 49, has served as our director since August 2006. Mr. Wan is a founding managing director of Causeway Media Partners, a private investment firm. He is also a founding general partner of Three Arch Partners, a venture capital firm. Prior to co-founding Three Arch Partners in 1993, Mr. Wan was a general partner at Brentwood Associates, a private equity firm from 1987 until 1993. Mr. Wan currently serves on the board of directors of QT Vascular Ltd., a public Singapore-based medical device company. From 1999 until its acquisition by athenahealth, Inc., in March 2013, Mr. Wan served on the board of directors of Epocrates, Inc., a company focused on providing mobile drug reference tools. Mr. Wan also serves on the board of directors of numerous private companies. Mr. Wan holds a B.S. in Engineering from Yale University and an M.B.A. from the Stanford Graduate School of Business. Mr. Wan's financial experience and extensive knowledge of our company provides him with the qualifications and skills to serve as a director.



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 independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Ernst & Young LLP has audited the Company's financial statements for fiscal 2012, 2013 and 2014. Representatives of Ernst & Young LLP 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 LLP as the Company's independent registered public accounting firm. However, the Audit Committee of the Board is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee 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 at the Annual Meeting will be required to ratify the selection of Ernst & Young LLP. Abstentions will be counted toward the tabulation of votes on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes are counted towards a quorum, but are not counted for any purpose in determining whether this matter has been approved.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table represents aggregate fees for the fiscal years ended December 31, 2014 and 2013 for professional services rendered by Ernst & Young LLP, our independent registered public accounting firm:

	Fiscal Year Ended			
	 2014		2013	
Audit Fees	\$ 657,464	\$	843,875	
Audit-Related Fees	—			
Tax Fees	_			
All Other Fees	_			
Total Fees	\$ 657,464	\$	843,875	

Audit Fees: Consists of fees for professional services rendered for the audit of our financial statements and internal controls over financial reporting, review of interim financial statements and fees for assistance with registration statements filed with the SEC, comfort letters and services that are normally provided by Ernst & Young LLP in connection with statutory and regulatory filings or engagements. Fees for the 2014 audit and the 2014 quarterly reviews of financial statements were \$635,000. Fees for the 2013 audit and 2013 quarterly reviews of financial statements were \$795,000.

Pre-Approval Policies and Procedures

Our Audit Committee pre-approves all audit and permissible non-audit services provided by Ernst & Young LLP. These services may include audit services, audit-related services, tax services and other services. Pre-approval may be given as part of the Audit Committee's approval of the scope of the engagement of the independent registered public accounting firm or on an individual explicit case-by-case basis.



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

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 2.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

INDEPENDENCE OF THE BOARD OF DIRECTORS

Under the rules of the NASDAQ Stock Market, LLC, or NASDAQ, "independent" directors must comprise a majority of a listed company's board of directors within a specified period following that company's listing date in conjunction with its initial public offering ("IPO"). In addition, applicable NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating committees be independent within the meaning of applicable NASDAQ rules. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act.

Our Board of Directors undertook a review of the independence of each director and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. As a result of this review, our Board of Directors determined that all of our directors, other than Mr. Rosen, who was appointed interim Chief Executive Officer on April 1, 2015, Dr. Palmer, our Chief Medical Officer, and Mr. King, our former President and Chief Executive Officer, who resigned from the Board of Directors on March 31, 2015, qualify as "independent" directors within the meaning of the NASDAQ rules. Accordingly, a majority of our directors are independent, as required under applicable NASDAQ rules. In making this determination, our Board of Directors considered Mr. Wan's affiliation with Three Arch Partners, one of our stockholders. Our non-employee directors have been meeting, and we anticipate that they will continue to meet, in regularly scheduled executive sessions at which only non-employee directors are present.

BOARD LEADERSHIP STRUCTURE

Our Board of Directors has a Chairman, Mr. Adams since February 2013, who has authority, among other things, to preside over Board meetings, including meetings of the independent directors. Accordingly, the Chairman has substantial ability to shape the work of our Board. The Company believes that separation of the roles of Chairman and Chief Executive Officer reinforces the independence of our Board in its oversight of the business and affairs of the Company. However, no single leadership model is right for all companies and at all times. Our Board recognizes that depending on the circumstances, other leadership models, such as combining the role of Chairman with the role of Chief Executive Officer, might be appropriate. Accordingly, the Board may periodically review its leadership structure.

ROLE OF THE BOARD IN RISK OVERSIGHT

Our Board is generally responsible for the oversight of corporate risk in its review and deliberations relating to our activities and has determined that our principal source of risk falls into two categories, financial and product development. The Audit Committee oversees management of financial risks; our Board regularly reviews information regarding our cash position, liquidity and operations, as well as the risks associated with each. The Board regularly reviews plans, results and potential risks related to our lead therapeutic development programs and other preclinical programs as well as financial and strategic risk related to our operations.

In addition, our Nominating and Corporate Governance Committee monitors the effectiveness of our corporate governance guidelines and policies and manages risks associated with the independence of the Board and potential conflicts of interest. Our Compensation Committee oversees risk management as it relates to our compensation plans, policies and practices for all employees including executives particularly whether our compensation programs may create incentives for our employees to take excessive or inappropriate risks which could have a material adverse effect on the Company. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire Board is regularly informed through committee reports about such risks.

MEETINGS OF THE BOARD OF DIRECTORS

The Board of Directors met 10 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.

ANNUAL MEETING ATTENDANCE

We do not have a formal policy regarding attendance by members of our Board at annual meetings of stockholders; however, directors are encouraged to attend all such meetings. In 2014, all of our directors attended the 2014 Annual Meeting of Stockholders.

INFORMATION REGARDING COMMITTEES OF THE BOARD OF DIRECTORS

The Board has three committees: an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee, each of which has the composition and responsibilities described below.

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. The Audit Committee evaluates the performance of and assesses the qualifications of the independent auditors; determines and approves the engagement of the independent auditors; determines whether to retain or terminate the existing independent auditors or to appoint and engage new independent auditors; reviews and approves the retention of the independent auditors on the Company's audit engagement team as required by law; reviews and approves or rejects transactions between the Company and any related persons; confers with management and the independent auditors regarding the effectiveness of internal controls over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and meets to review the Company's annual audited financial statements and quarterly financial statements with management and the independent auditor, including a review of the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

The Audit Committee was composed of three directors: Messrs. Edwards and Rosen and Dr. Hoffman, through March 31, 2015, each of whom was a non-employee member of our board of directors. Effective April 1, 2015, Mr. Rosen resigned from the Audit Committee in conjunction with his appointment as our interim Chief Executive Officer, and the Board of Directors appointed Mr. Adams to the Audit Committee. Since that time, the Audit Committee has been comprised of three directors: Messrs. Edwards, Adams and Dr. Hoffman, each of whom is a non-employee member of our board of directors. The Audit Committee met five times during the fiscal year. The Audit Committee has adopted a written charter that is available to stockholders on the Company's website at <u>www.acelrx.com</u>.

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)(i) and (ii) of the NASDAQ listing standards).

In addition, our Board of Directors has determined that each of the directors serving on our audit committee meets the requirements for financial literacy under applicable rules and regulations of the SEC and NASDAQ. Our Board has also determined that Mr. Edwards qualifies as an "audit committee financial expert" within the meaning of SEC regulations. In making this determination, our Board considered the overall knowledge, experience and familiarity of Mr. Edwards with accounting matters, in analyzing and evaluating financial statements and in managing private equity investments. Mr. Edwards serves as the Chairman of the Audit Committee. The composition of the audit committee satisfies the independence and other requirements of NASDAQ and the SEC.

Compensation Committee

The Compensation Committee is comprised of three directors: Dr. Afable and Messrs. Wan and Adams, with Mr. Wan serving as Chairman of the Compensation Committee from December 11, 2013 through May 6, 2014 and Dr. Afable serving as the Chairman of the Compensation Committee since that time. All members of the Company's Compensation Committee are independent (as independence is currently defined in Rules 5605(a)(2) and 5605(d)(2) of the NASDAQ listing standards). The Compensation Committee met four times during the fiscal year. The Compensation Committee has adopted a written charter that is available to stockholders on the Company's website at *www.acelrx.com*.

The Compensation Committee of the Board of Directors acts on behalf of the Board to review, recommend for adoption and oversee the Company's compensation strategy, policies, plans and programs, including:

- approving or recommending for approval to our Board of Directors the compensation and other terms of employment of our executive officers;
- approving or recommending to our Board of Directors performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- evaluating and approving the equity incentive plans, compensation plans and similar programs, as well as modification or termination of existing plans and programs;
- evaluating and recommending to our Board of Directors the type and amount of compensation to be paid or awarded to Board members;
- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;

- recommending to our Board of Directors compensation-related proposals to be considered at our annual meetings, including the frequency of advisory votes on executive compensation;
- reviewing and discussing with our management any conflicts of interest raised by the work of any compensation consultants;
- reviewing the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
- approving or recommending to our Board of Directors the terms of any employment agreements, severance arrangements, change in control
 protections and any other compensatory arrangements for our executive officers;
- reviewing with management our disclosures under the caption "Compensation Discussion and Analysis," and recommending to the full Board its inclusion in our reports to be filed with the SEC;
- preparing the Compensation Committee report, for our annual proxy statement;
- · reviewing the adequacy of our Compensation Committee charter on a periodic basis; and
- reviewing and evaluating, at least annually, the performance of the Compensation Committee and its charter.

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, 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, and assessing the performance of the Board.

The Nominating and Corporate Governance Committee is comprised of three directors: Dr. Hoffman and Messrs. Wan and Adams. Mr. Wan serves as Chairman of the Nominating and Corporate Governance Committee. Our Board of Directors has determined that Dr. Hoffman and Messrs. Wan and Adams are independent (as independence is currently defined in Rule 5605(a)(2) of the NASDAQ listing standards). The Nominating and Corporate Governance Committee met once during fiscal 2014. The Nominating and Corporate Governance Committee has adopted a written charter that is available to stockholders on the Company's website and *www.acelrx.com*.

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, being over 21 years of age 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 NASDAO 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 for recommendation to the Board by majority vote.

The Nominating and Corporate Governance Committee of the board of directors, to date, has not adopted a formal policy with regard to the consideration of director candidates recommended by stockholders on a case-by-case basis, as appropriate. 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. To date, 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. To date, the Nominating and Corporate Governance Committee has not received any such nominations nor has it rejected a director nominee from a stockholder or stockholders holding more than 5% of our voting stock. 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 our Secretary at the following address: 351 Galveston Drive, Redwood City, CA 94063, at least 120 days prior to the anniversary date of the mailing of the Company's proxy statement for the last annual meeting of stockholders. Submissions must include the full name of the proposed nominee, a description of the proposed nominee's business experience for at least the previous five years, complete biographical information, a description of the proposed nominee's qualifications as a director and a representation that the nominating stockholder is a beneficial or record holder of the Company's stock and has been a holder for at least one year. 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.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Compensation Committee currently consists of directors Messrs. Afable, Wan and Adams. None of the members of our Compensation Committee during 2014 is currently or has been, at any time since our formation, one of our officers or employees. During 2014, no executive officer served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our Board of Directors or our Compensation Committee. None of the members of our Compensation Committee during 2014 currently has or has had any relationship or transaction with a related person requiring disclosure pursuant to Item 404 of Regulation S-K.

STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

Historically, the Company has not provided a formal process related to stockholder communications with the Board. Nevertheless, every effort has been made to ensure that the views of stockholders are heard by the Board or individual directors, as applicable, and that appropriate responses are provided to stockholders in a timely manner. The Company believes its responsiveness to stockholder communications to the Board has been excellent.

CODE OF BUSINESS CONDUCT AND ETHICS

The Company has adopted the AcelRx Pharmaceuticals, Inc. Code of Business Conduct and Ethics that applies to all officers, directors and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The Code of Business Conduct and Ethics is available on our website at *www.acelrx.com*. Stockholders may request a free copy of the Code of Business Conduct and Ethics by submitting a written request to: AcelRx Pharmaceuticals, Inc., Attention: Investor Relations, 351 Galveston Drive, Redwood City, CA 94063. If we make any substantive amendments to the Code of Business Conduct and Ethics or grant any waiver from a provision of the Code of Business Conduct and Ethics to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our website.



REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

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

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 pursuant to applicable auditing standards. 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.

Mark G. Edwards Howard B. Rosen Stephen J. Hoffman, Ph.D., M.D.

13

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth certain information concerning our executive officers as of April 27, 2015:

Name	Age	Position
Howard B. Rosen	57	Director, Interim Chief Executive Officer
Timothy E. Morris	53	Chief Financial Officer
Pamela P. Palmer, M.D., Ph.D.	52	Director, Chief Medical Officer and Co-Founder
Lawrence G. Hamel	63	Chief Development Officer
Badri Dasu	52	Chief Engineering Officer
Jane Wright-Mitchell	46	Chief Legal Officer

Howard B. Rosen. Mr. Rosen's biography is included above under the section titled "Proposal 1—Election of Directors— Class III Directors Continuing in Office Until the 2017 Annual Meeting."

Timothy E. Morris has served as our Chief Financial Officer since March 2014. From November 2004 to December 2013, Mr. Morris served as Senior Vice President Finance and Global Corporate Development, Chief Financial Officer of VIVUS, Inc. a biopharmaceutical company. Mr. Morris graduated cum laude with a B.S. in Business with an emphasis in Accounting from California State University, Chico, and is a Certified Public Accountant.

Pamela P. Palmer, M.D., Ph.D. Dr. Palmer's biography is included above under the section titled "Proposal 1—Election of Directors—Class II Directors Continuing in Office Until the 2016 Annual Meeting."

Lawrence G. Hamel has served as our Chief Development Officer since September 2006. From 1986 until September 2006, Mr. Hamel served as Product Development Manager, Director Project Management, Executive Director Oral Product Development, and Vice President Oral Products Development at ALZA Corporation. From 1977 until 1985, Mr. Hamel held a number of other positions at ALZA Corporation, including Senior Chemist, Research Scientist, and Senior Research Fellow. Mr. Hamel holds a B.S. in Biology from the University of Michigan.

Badri Dasu has served as our Chief Engineering Officer since September 2007. From December 2005 until September 2007, Mr. Dasu served as Vice President of Medical Device Engineering at Anesiva, Inc., a biopharmaceutical company. From March 2002 until December 2005, Mr. Dasu served as Vice President for Manufacturing and Device Development at AlgoRx Pharmaceuticals, Inc., an emerging pain management company, which merged with Corgentech Inc., a biotechnology company, in December 2005. From January 2000 until March 2002, Mr. Dasu served as Vice President of Manufacturing and Process Development at PowderJect Pharmaceuticals, a vaccine, drug and diagnostics delivery company that was acquired by Chiron Corporation in 2003 and later acquired by Novartis AG, a global healthcare and pharmaceutical company, in 2006. Previously, Mr. Dasu served in various capacities in process development at Metrika, Inc., a company focused on the manufacture and marketing of disposable diabetes monitoring products that was acquired by Bayer HealthCare, LLC in 2006, and at Cygnus, Inc., a drug delivery and specialty pharmaceuticals company. Mr. Dasu holds a B.E. in Chemical Engineering from the University of Mangalore, India and a M.S. in Chemical Engineering from the University of Tulsa.

Jane Wright-Mitchell has served as our Chief Legal Officer since July 2014. From January 2012 to June 2014, Ms. Wright-Mitchell served as Associate General Counsel at Mesoblast, Inc., a biopharmaceutical company. Prior to joining Mesoblast, Ms. Wright-Mitchell held the position of Assistant General Counsel at Purdue Pharma from November 2010 to January 2012 and Associate General Counsel at NeurogesX, Inc. from May 2008 to October 2010. Ms. Wright-Mitchell received her J.D. from Chicago-Kent College of Law, Pharm.D from the University of Illinois, Chicago and B.S. in Biological Sciences from Clemson University. She is a registered pharmacist (Illinois) and is registered to practice before the U.S. Patent and Trademark Office.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Our compensation discussion and analysis ("CD&A") discusses the compensation of the individuals who served as our executive officers during 2014, as set forth in the summary compensation table, subsequent tables and related disclosure in this proxy statement. Our CD&A describes our overall executive compensation philosophy, objectives and practices, as well as the Compensation Committee's decisions and determinations regarding executive compensation for 2014. It also describes key decisions made by the Compensation Committee for 2015 prior to the filing of this proxy statement.

We refer to the following individuals as "named executive officers" for 2014:

Name	Title
Richard King	Former President and Chief Executive Officer
Timothy E. Morris	Chief Financial Officer
James H. Welch	Former Chief Financial Officer
Pamela P. Palmer, M.D., Ph. D.	Chief Medical Officer
Badri Dasu	Chief Engineering Officer
Lawrence G. Hamel	Chief Development Officer

Our Leadership Transition

As announced on November 5, 2014, Richard King stepped down as President and Chief Executive Officer and resigned as a Director effective as of March 31, 2015. Howard Rosen, a member of our Board of Directors, agreed to serve in the additional capacities of interim Chief Executive Officer commencing April 1, 2015, while we search for a new Chief Executive Officer.

In addition, as announced on March 25, 2014, James Welch resigned as Chief Financial Officer, and Timothy Morris joined AcelRx as its Chief Financial Officer. Finally, as announced on June 2, 2014, David Chung resigned as Chief Commercial Officer. In connection with Mr. King and Mr. Welch's departures from AcelRx, each received severance benefits from us, which are described in more detail under the heading "Compensation Discussion and Analysis—Severance Benefits".

Executive Summary and 2014 Business Highlights

During the year, we were able to continue to advance the development and raise awareness of our product candidates, in particular, our Zalviso product, while maintaining appropriate financial management. However, our goals for 2014 placed significant emphasis on the approval of our new drug application for Zalviso by the U.S. Food and Drug Administration (the "FDA") and related commercial readiness activities. In July 2014, we received a Complete Response Letter for Zalviso from the FDA, in which the FDA requested additional bench data, and as a result we fell short of our expectations. Despite this setback, we achieved many of our corporate objectives and milestones, as follows:

- Publication of several Zalviso Phase 3 study manuscripts in peer-reviewed journals;
- Multiple presentations of clinical posters/abstracts at medical affairs meetings;
- Met financial budget goals for 2014;
- Received International Standards Organization 13485:2003 certification of our quality management system, an internationally
 recognized quality standard for medical devices issued by our notified body, the British Standards Institution; and
- Received CE Mark approval (Conformite Europeenne) for the Zalviso device, which permits the commercial use of the Zalviso device in the European Union.

In light of the recent changes in our executive management team and FDA developments, our Board of Directors adopted two separate supplemental cash bonus plans in 2014 tied to performance goals related to our Zalviso product in order to retain and motivate employees, which are described in more detail below under "Annual Incentive Bonuses." In the first quarter of March 2015, we also restructured our organization and reduced our workforce by 19 employees, or approximately 36% of our total workforce, as part of a plan to reduce operating costs and focus financial and development resources on achieving the FDA marketing approval for Zalviso and continued development of our ARX-04, our single dose applicator product.

Compensation Philosophy and Practices

At AcelRx, we believe that our compensation philosophy and programs are focused on pay-for-performance principles, and that they are strongly aligned with our stockholders' interests. Our Compensation Committee and our Board of Directors strive to achieve compensation policies and practices that will attract and retain talented and experienced executives to lead the company successfully in a competitive environment.

At our annual meeting in September 2013, we conducted our first advisory vote on executive compensation, commonly referred to as a "say-onpay" vote. At that time, approximately 99% of the votes affirmatively cast on the advisory say-on-pay proposal were voted in favor of the compensation of our named executive officers. The Compensation Committee understood this level of approval to indicate strong stockholder support for our executive compensation policies and programs generally, and as a result, our Compensation Committee has no plans to make any fundamental changes to our executive compensation programs in the near future. We anticipate holding our next say-on-pay vote at our 2016 stockholder annual meeting. Our Compensation Committee and our Board of Directors also remain committed to engaging with shareholders and are open to feedback, as described elsewhere in this proxy.

In 2014, we continued many of our key practices and programs that demonstrate good governance, including:

- An emphasis on pay for performance. A significant portion of our executive officers' total compensation is variable and at risk and tied directly to measurable performance, which aligns the interests of our executives with those of our stockholders. The new Zalviso Approval Plan is consistent with our emphasis on linking pay with performance.
- *Peer group positioning.* Using a peer group selected with the assistance of an independent compensation consultant, the Compensation Committee continues to target alignment of the elements of our executives' compensation to the 50th percentile of our peer group.
- Equity as a key component to align the interests of our executives with those of our stockholders. Our Compensation Committee continues to believe that keeping executives interests aligned with those of our stockholders is critical to driving toward achievement of long-term goals of both our stockholders and the company.

In 2014, we also continued practices that demonstrate good governance and careful stewardship of corporate assets, including:

- *Limited personal benefits.* Our executive officers are eligible for the same benefits as our non-executive salaried employees, and they do not receive any additional perquisites.
- No retirement benefits. We do not provide our executive officers with a traditional retirement plan, or with any supplemental deferred compensation or retirement benefits.
- No tax gross-ups. We do not provide our executive officers with any tax gross-ups.
- No single-trigger cash change in control benefits. We do not provide cash benefits to our executives upon a change in control, absent an actual termination of employment.

Compensation Processes and Procedures

Our Compensation Committee generally meets at least once in the first quarter of the year, and again throughout the year as needed. The agenda for each meeting is usually developed by the Chair of the Compensation Committee, in consultation with the Chief Executive Officer. From time to time, members of management and other employees as well as outside advisors or consultants are 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 Compensation Committee also meets regularly in executive session.

The Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. In determining compensation levels, Compensation Committee will generally consider the Company's overall financial condition and performance, peer company data and other survey materials, reports on current market conditions, operational data, tax and accounting information. The members of the Compensation Committee will also consider their own experiences with hiring and retaining executive officers at other companies.

In setting performance goals for the current year, the Compensation Committee will set goals for the clinical, regulatory, commercial, financial and corporate development areas of the Company.

Role of Compensation Committee's Independent Compensation Consultant

In 2014, the Compensation Committee engaged an independent compensation consultant, Compensia, Inc., to provide the Committee with a competitive market assessment of the current compensation for the Company's executive team. Compensia, Inc. did significant work for the Compensation Committee, including selecting and recommending a peer group of companies for the Compensation Committee to use for comparison purposes in evaluating our executive compensation policies and programs. After review and consultation with Compensia, Inc. the Compensation Committee has determined that Compensia, Inc. is independent and there is no conflict of interest resulting from retaining Compensia, Inc. currently. In reaching these conclusions, the Compensation Committee considered the factors set forth in Rule 10C-1 of the Securities Exchange Act of 1934, as amended, and applicable NASDAQ listing standards.

Under its charter, the Compensation Committee has the sole discretion to retain or obtain the advice of compensation consultants, legal counsel and other compensation advisers, and it has direct responsibility for the appointment, compensation and oversight of the work of any compensation adviser. The Compensation Committee also has the right to receive from the Company appropriate funding for the payment of reasonable compensation to the compensation adviser it selects, as well as the responsibility to consider certain independence factors before selecting such compensation advisers. The compensation consultant reports directly and exclusively to the Compensation Committee with respect to executive and non-employee director compensation matters.

Role of our Management

In general, our CEO and finance department work together to prepare materials requested by and to be presented to the Compensation Committee, including analyses of financial data, peer data comparisons and other briefing materials. Our CEO typically presents these proposals, along with any background information, to the Compensation Committee for review and consideration. The Compensation Committee may approve, modify, or reject those proposals, or may request additional information from management on those matters.

For setting compensation levels for executives other than our CEO, the Compensation Committee will solicit and consider the recommendations of the CEO, including his review of the officer's performance and contributions in the prior year, and his recommendations for the potential compensation levels that should be set for each executive officer for the coming year.

With respect to our CEO, the Compensation Committee generally prepares an evaluation of the CEO, which it then reviews with the independent members of the Board for their input and consideration. The Compensation Committee also submits to the independent Board members its recommendations for CEO compensation. The final compensation elements and levels for the CEO are then determined by the independent members of the Board.

No executive officer is present or participates directly in approving the amount of any component of his or her own compensation package.

Use of Peer Company Data

In 2012, our Compensation Committee selected a group of ten companies to comprise our peer group for executive compensation comparison purposes based on recommendations from Towers Watson, an independent compensation consultant. For 2013, our peer group remained unchanged from 2012. For 2014, our Compensation Committee sought to update our peer group for executive compensation comparison purposes in view of our strategic objective to commercialize our lead program. Compensia recommended a broader group of twenty companies for consideration, and our Compensation Committee approved the following changes based on recommendations from Compensia with input from our management:

- Two companies from our 2012/2013 peer group were retained (identified with an * below).
- Four companies were deleted because the companies had been acquired: NuPathe, MAP Pharmaceuticals, Cadence Pharmaceuticals and Ardea Biosciences.
- Four companies were deleted because their market capitalization fell outside of our peer group parameters: Anthera Pharmaceuticals, Pozen, Pain Therapeutics and Cortex Therapeutics.
- Eighteen new companies were added, with similar market capitalization, business focus and stage of development as AcelRx.

As a result, our peer group for 2014 consisted of the following companies:

Anacor Pharmaceuticals Inc. CTI BioPharma Corp. Dyax Corp. Exelixis, Inc. Omeros Corporation Pacira Pharmaceuticals, Inc.* Progenics Pharmaceuticals, Inc. Supernus Pharmaceuticals, Inc. XenoPort, Inc. ZIOPHARM Oncology, Inc. BioTime, Inc. ChemoCentryx, Inc. Dynavax Technologies Corporation Neurocrine Biosciences, Inc. Osiris Therapeutics, Inc. Portola Pharmaceuticals, Inc. Repligen Corporation VIVUS, Inc. XOMA Corporation Zogenix, Inc.*



Our Compensation Committee generally uses the peer group for a broad understanding of market compensation practices and our positioning within the peer group with respect to each element of our compensation program. In addition, the Compensation Committee finds the peer data useful in evaluating whether our overall executive compensation programs are providing sufficient incentive opportunities and retention components, given the competitive market that exists for talented and experienced executives. In some circumstances, our Compensation Committee targets compensation components to meet certain benchmarks, such as targeting salary to be at or near the 50th percentile of our peer group. However, our Compensation Committee believes that over-reliance on benchmarking can result in compensation that is unrelated to the value delivered by our executive officers because compensation benchmarking does not take the specific performance of our executives, the performance of the company as a whole, or other unique business circumstances into account.

Elements of Executive Compensation

Our Compensation Committee believes that our compensation programs should include short-term and long-term components, including cash and equity-based compensation, and should reward performance as measured against established goals. The Compensation Committee evaluates both performance and compensation to make sure that the compensation provided to executives remains competitive relative to compensation paid by companies of similar size and stage of development operating in the biotechnology and pharmaceutical industry, taking into account our relative performance and our own strategic goals. Our Compensation Committee considers the total current and potential long-term compensation of each of our executive officers in establishing each element of compensation, but views each element as related but distinct.

The compensation of our executive officers generally consists of four principal components: base salary, annual incentive bonuses, long-term equity incentives, and employee benefits. In 2014 we also adopted certain supplemental incentive bonus plans tied to achievement of regulatory approval for our Zalviso product. We also provide limited severance and other benefits following termination of employment under certain circumstances.

Base Salary

As a general matter, we pay our named executive officers a base salary to provide them a stable source of income for the work that they perform during the year. The Compensation Committee generally seeks to set executive salaries at or near the 50th percentile of our peer group. Base salaries are initially established through negotiation at the time the executive is hired, taking into account his or her qualifications, experience, prior salary, and competitive market salary information for similar positions in our industry. Thereafter, the Compensation Committee reviews the base salaries of our executive officers annually and adjustments, if any, are made based on our company's performance and available budget, the performance of each executive officer against his individual job and functional area's responsibilities, competitive market conditions for executive compensation for similar positions, as well as increases in the cost of living.

In January 2014, our Compensation Committee reviewed base salary levels for our named executive officers against salaries for similar positions from our peer group of companies, and also in light of the individual performance of our named executive officers during the prior calendar year. As a result of this review, all of our named executive officers who were then employed by us received merit increases to their base salaries based on their individual performance. These adjustments to the base salaries of our then-current named executive officers are shown in the table below.

	Increase to	2014
Name	Base Salary	Base Salary (\$)
Richard A. King	3.2%	490,000
James H. Welch	2.7%	315,750
Pamela P. Palmer, M.D., Ph. D.	2.9%	421,000
Badri Dasu	3.1%	310,250
Lawrence G. Hamel	2.9%	310,250

The Compensation Committee also reviewed and approved Mr. Morris's base salary, as well as the other terms of his offer letter, at its March 2014 meeting.

Annual Incentive Bonuses

Our annual Cash Bonus Plan is designed to provide an incentive to our executive officers and other employees to achieve our short-term corporate performance objectives, and to reward them when these objectives are achieved, while also taking into account the level of individual contribution. Under the annual Cash Bonus Plan, target bonus levels are assigned based on various categories of employees, with our executive employees having higher bonus opportunities, but also more pay at risk in the event our performance objectives are not achieved. Each year, the Compensation Committee reviews a detailed set of overall corporate performance goals for the current year for use under our annual bonus plan. These performance objectives are initially prepared by management, reviewed (and revised, if determined appropriate) by the Compensation Committee, and then presented to the full Board of Directors for approval. Goals under the annual incentive bonuses are set based on the Company's overall performance objectives, as well as the objectives for performance within each executive's functional area, including his relative individual contributions, while taking into account competitive market information.

Whether or not a bonus is paid for any year is within the discretion of our Compensation Committee. The actual bonus awarded in any year, if any, may be more or less than the target, depending primarily on the achievement of our corporate objectives, and an individual employee's achievement of his or her objectives. Our Compensation Committee also has the discretion to award bonuses, however, even if the applicable performance criteria set forth under the annual Cash Bonus Plan have not been met, or to award a bonus based on other criteria.

For 2014, the target bonus percentage was 50% of annual base salary for our Chief Executive Officer, and 37.5% of annual base salary for our Chief Financial Officer and Chief Medical Officer and 35% of annual base salary for the remaining named executive officers. Since our Chief Executive Officer is responsible for the overall performance of the Company, his 2014 annual bonus was based solely on the Company's overall performance in achieving corporate goals. For our other named executive officers, the cash bonus was weighted 60% on achievement of the Company's 2014 corporate objectives and 40% on achieving his or her individual performance goals, as determined by the Chief Executive Officer and recommended by the Compensation Committee and approved by the Board of Directors.

Our 2014 corporate performance objectives, as recommended by our Compensation Committee and approved by our Board of Directors, were as follows:

- obtain approval of the New Drug Application, or NDA, for Zalviso, from the U.S. Food and Drug Administration, or FDA;
- establish commercial capabilities and infrastructure to support U.S. commercial launch of Zalviso;
- obtain CE Mark (Conformite Europeenne) for Zalviso device in support of our partnership with Grunenthal for potential commercial launch of Zalviso;
- publication of Zalviso study manuscripts in peer-reviewed journals and presentations at medical affairs meetings;
- completion of a partnership deal for Zalviso or other product candidates; and
- meet 2014 financial budget goals.

•

In January 2015, the Compensation Committee reviewed the performance of the company against its 2014 goals and determined that the Company had achieved 37.5% of its 2014 corporate objectives, which was then presented and confirmed by the Board of Directors. This determination was made based on the Company's achievement of certain of the 2014 corporate objectives as follows:

- Publication of several Zalviso Phase 3 study manuscripts in peer-reviewed journals;
- Multiple presentations of clinical posters/abstracts at medical affairs meetings;
- Met financial budget goals for 2014;
- Received International Standards Organization 13485:2003 certification of our quality management system, an internationally recognized quality standard for medical devices issued by our notified body, the British Standards Institution; and
- Received CE Mark approval (Conformite Europeenne) for the Zalviso device, which permits the commercial use of the Zalviso device in the European Union.

At this same meeting, the Board of Directors also confirmed the performance level achieved by each of the named executive officers against his or her individual performance goals for 2014.

As noted above, since our Chief Executive Officer is responsible for the overall performance of the Company, his 2014 annual bonus was based solely on the Company's overall performance in achieving corporate goals.

In evaluating Mr. Morris' performance, the Compensation Committee considered his attainment of certain defined individual objectives. In particular, in 2014 Mr. Morris completed certain pre-defined financing initiatives on behalf of the Company, supported the Company's investor strategy and completed certain organizational infrastructure initiatives.

In evaluating Dr. Palmer's performance, the Compensation Committee considered her attainment of certain defined individual objectives. In particular, in 2014 Dr. Palmer completed certain clinical program efforts for Zalviso and ARX-04 on behalf of the Company, supported the effort to submit an NDA for Zalviso and completed certain abstract and poster presentations relating to the Company's product portfolio.

In evaluating Mr. Dasu's performance, the Compensation Committee considered his attainment of certain defined individual objectives. In particular, in 2014 Mr. Dasu completed certain engineering work in support of Zalviso device development, supported preparation and submission of the NDA for Zalviso and evolved the manufacturing strategy for Zalviso.

In evaluating Mr. Hamel's performance, the Compensation Committee considered his attainment of certain defined individual objectives. In particular, in 2014 Mr. Hamel completed certain pharmaceutical work in support of the filing of the MAA for Zalviso in Europe and preparation for potential commercial supplies.

Pursuant to the 2014 Bonus Plan, the Board of Directors awarded cash bonuses to our executives based on the confirmed attainment level of the 2014 corporate objectives and the confirmed attainment level of their respective individual performance goals for 2014. All bonus amounts were paid on February 20, 2015.

The table below provides the target bonus for each named executive officer, the level of performance achieved against the goals, and the amount of the actual bonus paid:

	2014 Target Bonus as a Percentage of Annual Base	2014 Target	Level of Achievement of Corporate	Level of Achievement of Individual	2014 Actual Bonus
Name	Salary	Bonus(\$)	Goals	Goals	Paid (\$)
Richard A. King	50%	245,000	37.5%	N/A	91,875
Timothy E. Morris ⁽¹⁾	37.5%	105,469	37.5%	110%	70,137
Pamela P. Palmer, M.D., Ph. D.	37.5%	157,875	37.5%	110%	104,987
Badri Dasu	35%	108,588	37.5%	100%	67,867
Lawrence G. Hamel	35%	108,588	37.5%	95%	65,695

(1) Mr. Morris was appointed our Chief Financial Officer in March 2014, and received a pro-rated bonus as a percentage of the base salary that he earned in 2014.

Supplemental Cash Bonus Plans

In light of the setback in efforts to commercialize our Zalviso product and certain departures at the executive level, our Board of Directors, in consultation with the Compensation Committee, adopted two supplemental, broad-based cash bonus plans intended to promote retention efforts and focus our employees on continued pursuit of FDA regulatory approval of Zalviso:

- In September 2014 we approved a supplemental cash bonus plan whereby we would pay a cash bonus to each current employee equal to 20% of his or her 2014 target annual bonus if AcelRx resubmitted a new drug application to the FDA covering the Zalviso device on or before March 31, 2015, subject to continued employment with us through the FDA submission date. No application has been filed, and therefore such bonus plan has terminated without payment of any bonuses.
- In December 2014, we approved a separate supplemental cash bonus plan that is tied to FDA approval of the Zalviso device. Under this plan, a cash bonus equal to 70% of an employee's 2014 target annual bonus (but calculated in reference to the employee's then-current base salary) is payable upon receipt of FDA approval of a new drug application for Zalviso, subject to continued employment with us through the FDA approval date. All employees of AcelRx as of December 1, 2014, including our named executive officers, are eligible to participate in this supplemental cash bonus plan.

Equity Compensation

The equity awards that we grant under our Equity Incentive Plan have been primarily in the form of stock options, and the awards granted by our Compensation Committee in 2014 to our named executive officers were solely stock options. The Compensation Committee believes that stock options continue to be the most appropriate vehicle for equity awards at this time, because our executives only are able to realize rewards if our stockholders also have gains.

In determining the size of long-term equity incentives to award to our named executive officers, the Compensation Committee refers to guidelines we have developed based on an executive's position, which in turn were developed based on third party survey data of companies in our industry. Our Compensation Committee also considers the role and responsibilities of the named executive officers, competitive factors, the non-equity compensation received by the named executive officers in current and previous years, as well as the total available pool of equity to be granted in the current fiscal year and each executive's current equity ownership in the Company and the extent to which outstanding awards are fully vested. In addition, we evaluate each employee's awards based on the factors described above and competitive market factors in our industry. After reviewing all of these factors, the Compensation Committee awarded our then-serving named executive officers the stock options reflected in the tables that following this Compensation Discussion and Analysis.

Our stock option awards typically vest over a four year period subject to the continued service of the employee to the Company. Twenty-five percent of the shares typically vest on the first anniversary of the option award, with the remaining shares vesting monthly in equal amounts over the remainder of the vesting period.

Perquisites and Other Benefits

Consistent with our compensation philosophy, we intend to continue to maintain our current benefits for our executive officers, which are also generally available to employees, including medical, dental, vision and life insurance coverage and 401(k) employer contributions; however, the Compensation Committee in its discretion may revise, amend or add to these benefits.

Employment Agreements and Arrangements

We have entered into offer letter agreements with each of our named executive officers, in connection with each named executive officer's commencement of employment with us. Each of our executive officers is employed "at-will," and each such executive officer's employment may be terminated at any time by us or the named executive officer. These offer letter agreements provide for the named executive officer's initial base salary, eligibility to participate in our standard benefit plans and in certain cases, the named executive officer's initial stock option grant along with vesting provisions with respect to that initial stock option grant.

In March 2014, we entered into an offer letter agreement with Mr. Morris, which provided for an initial annual base salary of \$375,000, and eligibility for an annual target bonus of up to 37.5% of his annual base salary, based upon achievement of a series of personal and company objectives, as determined by the Compensation Committee of the Board of Directors on an annual basis. The offer letter also provided for an initial stock option grant of 200,000 shares of our common stock, vesting with respect to 25% of the shares subject to this grant on March 25, 2015, with the remaining shares vesting on an equal monthly basis over the following 36 months, subject to his continued employment.

In March 2015 we announced that our Board of Directors had appointed Howard B. Rosen, a member of the Board of Directors, as interim Chief Executive Officer ("Interim CEO") effective April 1, 2015. Mr. Rosen's offer letter dated March 19, 2015, with an effective date of April 1, 2015, provides that he will be employed by the Company on an "at will" basis as Interim CEO and will receive: (i) an initial monthly base salary of \$35,000; (ii) at the completion of service as Interim CEO, Mr. Rosen will receive an additional lump sum payment equal to \$15,000 for each month or pro-rata portion thereof that Mr. Rosen served as Interim CEO; and (iii) an option to purchase 240,000 shares of the Company's common stock, vesting monthly at the rate of 1/12th of the total number of the option shares per month for the period during which Mr. Rosen serves as the Interim CEO and will stop vesting when Mr. Rosen no longer serves as Interim CEO. This option was granted with an exercise price equal to the closing price of the Company's common stock as listed on NASDAQ on the date of the grant.

Benefits Upon Termination and Change in Control

Severance Benefits.

• *Mr. King.* In December 2014, we entered into a separation agreement with Mr. King, under which Mr. King remained employed as our CEO, until March 31, 2015. Pursuant to the terms of the separation agreement, Mr. King is entitled to base salary and health benefits continuation for a period of twelve months, or through March 31, 2016, consistent with the severance terms contained in his employment agreement. Mr. King signed a waiver and release of claims in favor of the Company and resigned from the Board of Directors as a condition of receiving his severance benefits. In April 2015, AceIRx provided a lump sum payment to Mr. King, representing twelve months of his base salary, or \$490,000. Any stock options granted to Mr. King ceased vesting as of March 31, 2015, and the exercise period for any of Mr. King's options which were vested and exercisable as of March 31, 2015 was extended until December 31, 2015.

- *Mr. Morris.* Mr. Morris' offer letter also provides that in the event that Mr. Morris' employment is terminated by us without cause, or he resigns for good reason, in each case within three months prior to, or one year following, a change in control of AcelRx, he will be entitled to a lump sum cash payment equal to nine months of Mr. Morris' base salary and health benefits continuation for a period of nine months. In order to receive severance benefits, Mr. Morris will need to sign a waiver and release of claims in favor of AcelRx.
- *Mr. Welch.* In March 2014, we entered into a separation and consulting agreement with Mr. Welch, which provided for a lump sum cash payment equal to three months of his then current base salary and health benefits continuation for a period of three months. In addition, Mr. Welch remained a consultant through a transition period from March 24, 2014, the employment termination date, continuing for three months thereafter. In exchange for these severance benefits, Mr. Welch signed a release of claims in favor of AcelRx.
- Dr. Palmer. Under our offer letter agreement with Dr. Palmer, in the event that her employment is terminated by us without cause, or in a manner that constitutes an involuntary termination, in each case within one year following a change in control (as these terms are defined in the offer letter), she will be entitled to base salary and health benefits continuation for a period of six months. In order to receive these severance benefits, she must sign a waiver and release of claims in favor of AcelRx and resign from our Board of Directors if so requested by the Board of Directors.

Long-Term Equity Incentive Award Vesting Acceleration. Under their offer letter agreements, each of our named executive officers are eligible for full vesting of certain equity awards in the event their service with us is terminated within certain time periods and under certain circumstances in connection with a change of control, as follows, subject, in each case, to the executive's execution of a release of claims in favor of the company:

- Dr. Palmer, Mr. Dasu and Mr. Hamel are each eligible for full vesting of all of their outstanding stock options if any of them is terminated on or within 18 months after a change of control either without cause or due to an "involuntary termination";
- Mr. Morris is eligible for full vesting of all of his outstanding stock options if he is terminated without cause or for good reason within three months before or one year after a change of control.

Equity and Compensation Policies and Practices

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

Analysis of Risks Presented by our Compensation Policies and Programs. Our Compensation Committee has discussed the concept of risk as it relates to the forms and amounts of compensation at AceIRx and does not believe that our compensation arrangements encourage excessive or inappropriate risk-taking.

Clawback Policy. We have not yet adopted a formal clawback policy for equity awards because we await the issuance of clarifying regulations by the SEC regarding required elements of any such clawback policy. Once final rules are released regarding clawback requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act, we intend to review our policies and plans and, if necessary, amend them to comply with the new mandates.

Effect of Accounting and Tax Treatment on Compensation Decisions. Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Code"), imposes a limit on the amount of compensation that may be deductible in any one year with respect to certain executive officers, unless certain specific criteria are satisfied. As a newly-public company, we are not yet subject to the limitations of Section 162(m) of the Code, and therefore, our Compensation Committee has not yet adopted a policy requiring that all compensation be deductible, although it expects to review this issue in the coming year. The Compensation Committee does consider the impact of Section 409A of the Code, and in general, our executive plans and programs are designed to comply with the requirements of that section so as to avoid possible adverse tax consequences that may result from non-compliance.



COMPENSATION COMMITTEE REPORT

The material in this report is not "soliciting material," is not deemed "filed" with the Commission and is not to be incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, other than in AcelRx's Annual Report on Form 10-K where it shall be deemed to be furnished, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis contained in this proxy statement. Based on this review and discussion, the Compensation Committee has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement and incorporated into the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2014.

The foregoing report has been furnished by the Compensation Committee.

Richard Afable, M.D., Committee Chair Mark Wan Adrian Adams

Summary Compensation Table

The following table sets forth certain summary information for the year indicated with respect to the compensation earned by our Chief Executive Officer, our Chief Financial Officer, our Chief Financial Officer and each of our three other most highly compensated executive officers as of December 31, 2014. We refer to these individuals as our "named executive officers" elsewhere in this proxy statement.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$) ⁽²⁾	All Other Compensation (\$) ⁽³⁾	Total (\$)
Richard A. King	2014	490,000	1,440,608 ⁽⁴⁾	91,875	7,800	2,030,283
Former President and Chief	2013	475,000	1,871,040	277,875	7,650	2,631,565
Executive Officer	2012	426,006	616,203	170,400	7,500	1,220,109
Timothy E. Morris ⁽⁵⁾ Chief Financial Officer	2014	288,352	1,741,931	70,137	5,625	2,106,045
James H. Welch	2014	109.390	490.682		85,965	686,037
Former Chief Financial	2013	307,500	523,150	124,845	7,650	963,145
Officer	2012	299,000	170,561	95,232	7,500	572,293
Pamela P. Palmer, M.D., Ph.D.	2014	421,000	1,127,522	104,987	7,800	1,661,309
Chief Medical Officer	2013	409.000	1,432,226	174.643	7,650	2,023,519
ennej meanear ojjneer	2012	396,550	544,991	134,034	7,500	1,083,075
	2014					
Badri Dasu	2014	310,250	693,723	67,867	7,800	1,079,640
Chief Engineering Officer	2013	301,500	484,050	128,527	7,650	921,727
	2012	278,000	120,600	93,964	7,500	500,064
Lawrence G. Hamel	2014	310,250	693,723	65,695	7,800	1,077,468
Chief Development Officer	2013	301,000	458,346	124,520	7,650	891,516
	2012	292,800	120,600	95,160	7,500	516,060

(1) The dollar amounts in this column represent the aggregate grant date fair value of all option awards granted during the indicated year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. For a discussion of valuation assumptions, see Note 1 to our financial statements and the discussion under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates—Stock-Based Compensation" included in our Annual Report on Form 10-K filed with the SEC on March 13, 2015. These amounts do not necessarily correspond to the actual value that may be recognized from the option awards by the named executive officers.

(2) The dollar amounts reflect the cash awards made to the named executive officers under the Company's 2014 Cash Bonus Plan.

- (3) Includes contributions made by the Company under its 401(k) Plan on behalf of each named executive officer. Mr. Welch's total includes \$78,938 paid for consulting services during the transition period, as per the terms of his separation and consulting agreement, and contributions made by the Company under its 401(k) Plan on his behalf of \$7,027.
- (4) Pursuant to the terms of Mr. King's separation agreement, the exercise period for all of Mr. King's options which were vested and exercisable as of March 31, 2015 was extended until December 31, 2015. Consistent with the guidance in ASC 718, we calculated the incremental fair value of the modified options, using the Black-Scholes option-pricing model, to be \$295,683, which is included in the amount disclosed in the table above.
- (5) Mr. Morris' employment with the Company began in March 2014. Compensation reported is for a partial year of employment.

Grants of Plan Based Awards in Fiscal 2014

The following table provides information with regard to each grant of plan-based award made to a named executive officer under any plan during the fiscal year ended December 31, 2014.

	Grant Date		l Future Payou quity Incentive		Number of Securities Underlying Options(#) ⁽²⁾	Exerciseor BasePrice of OptionAwards(\$/Sh) ⁽³⁾	Grant DateFair Valueof OptionAwards(\$)
			Awards ⁽¹⁾				
Name	-	Threshold(\$)	Target(\$)	Maximum(\$)			
Richard A. King							
Stock Options	2/4/2014	—	—	—	175,000	10.34	1,144,925
Stock Options(4)	6/15/2010	—	—	—	456,609	2.56	36,911
Stock Options(4)	3/2/2011	—	—	—	115,208	3.45	27,999
Stock Options(4)	2/13/2012	—	—	—	202,123	3.39	46,086
Stock Options(4)	2/5/2013	—	—	—	264,092	5.31	170,265
Stock Options(4)	2/4/2014	—	—	—	47,395	10.34	14,422
Annual Bonus Plan	—	—	245,000	367,500	_	—	—
Timothy E. Morris							
Stock Options	5/7/2014	—	—	—	200,000	10.34	1,311,678
Stock Options	12/2/2014	—	—	—	100,000	6.60	430,253
Annual Bonus Plan			140,625	210,938	—	<u> </u>	—
James H. Welch							
Stock Options	2/4/2014	—	—	—	75,000	10.34	490,682
Annual Bonus Plan			118,406	177,609	—	<u> </u>	—
Pamela P. Palmer, M.D.,							
Ph. D.							
Stock Options	2/4/2014	—	—	—	100,000	10.34	654,243
Stock Options	12/2/2014	—	—	—	110,000	6.60	473,279
Annual Bonus Plan		—	157,875	236,813		—	—
Badri Dasu							
Stock Options	2/4/2014	—	—	—	60,000	10.34	392,546
Stock Options	12/2/2014	—	—	—	70,000	6.60	301,177
Annual Bonus Plan		—	108,588	162,881	—	—	—
Lawrence G. Hamel							
Stock Options	2/4/2014	—	—	—	60,000	10.34	392,546
Stock Options	12/2/2014	—	—	—	70,000	6.60	301,177
Annual Bonus Plan			108,588	162,881	_	—	_

(1) The Annual Bonus Plan amount in the table above reflects the minimum, target and maximum value of a cash bonus award to each respective named executive officer in 2014 under the Annual Bonus Plan approved by the Compensation Committee. The cash bonus award amounts actually paid under the Annual Bonus Plan to the named executive officers in 2014 are shown in the Summary Compensation Table for 2014 under the heading "Non-Equity Incentive Plan Compensation" and the accompanying footnote. Please refer to "Compensation Discussion and Analysis" above for a description of the Annual Bonus Plan.

- (2) The stock options granted in 2014 are generally exercisable starting on the twelve month anniversary of the vesting commencement date, with 25% of the shares covered thereby becoming exercisable at that time, with the remaining shares vesting on an equal monthly basis over the following 36 months and each of these options expiring 10 years from the date of grant.
- (3) Options are granted at an exercise price equal to the fair market value of our Common Stock, as determined by reference to the closing price reported by the NASDAQ Global Market on the date of grant.
- (4) On December 15, 2014, the Company and Mr. King entered into a separation agreement (the "Separation Agreement"). Pursuant to the terms of the Separation Agreement, the exercise period for all of Mr. King's options which were vested and exercisable as of March 31, 2015 was extended until December 31, 2015. The stock options reported in the table above and identified by this footnote (4) represent the same stock options that were originally granted at the exercise price on the original grant date, with the shares as shown representing the shares that were vested and exercisable at March 31, 2015, subject to the modification, and the amounts reported in the "Grant Date Fair Value of Stock and Option Awards" column with respect to the modified stock options, the incremental fair value on the modification date associated with those modified stock options. For purposes of these modified stock options, the "Grant Date" represents the original grant date for these modified options, which is the grant date determined for financial statement reporting purposes pursuant to ASC 718 and was not changed as a result of the modification. The modification date for purposes of the modified stock options is the date the Company modified the options, or December 15, 2014.

Outstanding Equity Awards at December 31, 2014

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2014.

	Option Awards					
	Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price	Option Expiration		
Name	Exercisable	Unexercisable	(\$)	Date		
Richard A. King	232,401 185,734 108,007 456,609	175,000 ⁽¹⁾ 274,656 ⁽²⁾ 76,480 ⁽³⁾ 7,201 ⁽⁴⁾	10.34 5.31 3.39 3.45 2.56	02/04/2024 02/05/2023 02/13/2022 03/02/2021 06/15/2020		
Timothy E. Morris		200,000(5) 100,000 ⁽⁶⁾	10.34 6.60	05/07/2024 12/02/2024		
James H. Welch	_	—	—	_		
Pamela P. Palmer, M.D., Ph.D. Badri Dasu		$\begin{array}{c} 110,000^{(6)}\\ 100,000^{(1)}\\ 210,241^{(2)}\\ 67,641^{(3)}\\ 6,251^{(4)}\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	$\begin{array}{c} 6.60\\ 10.34\\ 5.31\\ 3.39\\ 3.45\\ 2.56\\ 5.52\\ 4.00\\ 1.32\\ \hline \end{array}$	12/02/2024 02/04/2024 02/05/2023 02/07/2022 03/02/2021 06/15/2020 03/25/2019 08/14/2018 04/03/2017 12/02/2024 02/04/2024 02/05/2023 02/07/2022 03/02/2021 06/15/2020 03/25/2019		
	37,500	_	1.20	10/25/2017		
Lawrence G. Hamel	56,990 36,350 29,062 62,500 12,500 9,122	70,000 ⁽⁶⁾ 60,000 ⁽¹⁾ 67,353 ⁽²⁾ 14,969 ⁽³⁾ 1,938 ⁽⁴⁾ —	6.60 10.34 5.31 3.39 3.45 2.56 5.52 1.20	12/02/2024 02/04/2024 02/05/2023 02/07/2022 03/02/2021 06/15/2020 03/25/2019 10/25/2017		

- (1) The shares subject to this stock option vested as to 1/4 of the shares on February 4, 2015, with the remaining shares vesting on an equal monthly basis over the following 36 months.
- (2) The shares subject to this stock option vested as to 1/4 of the shares on February 5, 2014, with the remaining shares vesting on an equal monthly basis over the following 36 months.
- (3) The shares subject to this stock option vested as to 1/4 of the shares on February 13, 2013, with the remaining shares vesting on an equal monthly basis over the following 36 months.
- (4) The shares subject to this stock option vested as to 1/4 of the shares on March 2, 2012, with the remaining shares vesting on an equal monthly basis over the following 36 months.
- (5) The shares subject to this stock option vested as to 1/4 of the shares on March 25, 2015, with the remaining shares vesting on an equal monthly basis over the following 36 months.
- (6) The shares subject to this stock option will vest as to 1/4 of the shares on December 2, 2015, with the remaining shares vesting on an equal monthly basis over the following 36 months.

Option Exercises and Stock Vested

The following table shows for the fiscal year ended December 31, 2014, certain information regarding option exercises and restricted stock units vested during the year with respect to the named executive officers.

Name	Number of Shares Acquired on Exercise	Value Realized on Exercise(1)	Number of Shares Acquired on Vesting	Value Realized on Vesting ⁽²⁾
Richard A. King		 _	30,865	\$ 352,787
Timothy E. Morris	_	_		_
James H. Welch	201,718	\$ 416,728		
Pamela P. Palmer, M.D., Ph. D.	_	_	16,899	\$ 193,156
Badri Dasu	_	_	3,718	\$ 42,497
Lawrence G. Hamel	31,680	\$ 315,589	4,225	\$ 48,292

⁽¹⁾ The aggregate dollar amount realized upon the exercise of a stock option represents the difference between the aggregate market price of the shares of our Common Stock underlying that stock option on the date of exercise, as determined by reference to the closing price reported by the NASDAQ Global Market on the date of exercise, and the aggregate exercise price of the option.

⁽²⁾ Reflects restricted stock units that vested during the fiscal year ended December 31, 2014. Value realized is based on closing price on settlement date.



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

The table below reflects the amount of compensation to each of the named executive officers pursuant to each executive's employment agreement in the event of termination of such executive's employment without cause or in the event of a change of control, described in detail in "Employment Agreements and Arrangements," in the Compensation Discussion and Analysis. The amount of compensation payable to each named executive officer upon termination without cause and upon termination without cause or good reason following a change of control is shown below. The amounts shown assume that such termination was effective as of December 31, 2014, and thus are estimates of the amounts that would be paid out to the executives upon their termination, except in the case of Mr. Welch. The amounts shown in the table below for Mr. Welch represent the actual amounts paid to him in connection with his termination in 2014.

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

Executive benefits and payments upon termination ⁽¹⁾ :	Involuntary termination not for cause or by constructive termination not in connection with a change of control(\$)	Involuntary termination not for cause or by constructive termination following a change of control(\$)
Richard A. King		
Base salary	490,000	490,000
Medical continuation	22,800	25,600
Value of accelerated stock options ⁽²⁾	_	669,784
Timothy E. Morris		
Base salary	_	281,250
Medical continuation	_	20,000
Value of accelerated stock options ⁽²⁾	—	13,000
James H. Welch		
Base salary	78,938	_
Medical continuation	5,714	
Value of accelerated stock options ⁽²⁾	_	_
Pamela P. Palmer, M.D., Ph.D.		
Base salary	_	210,500
Medical continuation	—	7,500
Value of accelerated stock options ⁽²⁾	_	1,626,544
Badri Dasu		
Base salary		
Medical continuation	_	
Value of accelerated stock options ⁽²⁾	_	170,866
Lawrence G. Hamel		
Base salary		_
Medical continuation		_
Value of accelerated stock options ⁽²⁾	—	214,377

⁽¹⁾ Termination and change of control benefits for each of our Named Executive Officers are set forth in their respective employment agreements. Please see "Compensation Discussion and Analysis—Benefits Upon Termination and Change in Control" for details.

(2) Represents the aggregate value of the acceleration of vesting of the executive's unvested stock options based on the spread between the closing price of our Common Stock on December 31, 2014 of \$6.73 and the exercise price of the stock options. Accordingly, the aggregate intrinsic value represents only the value for those options in which the exercise price of the option is less than the market value of our stock on December 31, 2014.

Director Compensation

Non-Employee Director Compensation

Cash Compensation Arrangements

In February 2013, our board of directors revised the non-employee director compensation policy, which became effective January 1, 2013. Pursuant to the revised non-employee director compensation policy, each member of our board of directors, who is not our employee, receives an annual retainer of \$40,000. In addition, our non-employee directors receive the following cash compensation for board services, as applicable:

- the board chair receives an additional annual retainer of \$20,000;
- the audit committee chair receives an additional annual retainer of \$15,000;
- the compensation committee chair receives an additional annual retainer of \$7,500;
- the nominating and corporate governance committee chair receives an additional annual retainer of \$6,000;
- an audit committee member receives an additional annual retainer of \$7,500;
- a compensation committee member receives an additional annual retainer of \$3,750; and
- a nominating and corporate governance committee member receives an additional retainer of \$3,000

All board and committee retainers accrue and are payable on a quarterly basis at the end of each calendar quarter of service. We continue to reimburse our non-employee directors for travel, lodging and other reasonable expenses incurred in connection with their attendance at board of director or committee meetings.

Equity Compensation Arrangements

Our non-employee director compensation policy provides for automatic grants of stock options to our non-employee directors under our 2011 Incentive Plan. Upon election or appointment to our board, each non-employee director will receive an initial grant of a stock option to purchase 15,000 shares of our common stock, which will vest as to 1/36th of the shares subject to the option on an equal monthly basis over a three-year period. Additionally, on the date of each annual meeting of stockholders, each non-employee director who is then serving as a director or who is elected to our board of directors on the date of such annual meeting was eligible to receive a grant of a stock option to purchase 12,500 shares of our common stock, prior to our amended director compensation policy, effective January 1, 2013, which vest as to 1/24th of the shares subject to the option on an equal monthly basis over a two-year period. Beginning with our 2013 annual meeting, each non-employee director who is then serving as a director or who is elected to our board of directors on the date of such annual meeting was eligible to receive a grant of a stock option to purchase 15,000 shares of our common stock, which will vest as to 1/24th of the shares subject to the option on an equal monthly basis over a two-year period. All these of our common stock on the date of the grant, and shall be entitled to full vesting acceleration as of immediately prior to the effective date of certain change in control transactions involving us, such as our liquidation or a dissolution of or an event that results in a material change in the ownership of our company.

28

2014 Director Compensation

The following table sets forth certain summary information for the year ended December 31, 2014 with respect to the compensation of our nonemployee directors. Neither Mr. King, who was an executive officer, nor Dr. Palmer, who is an executive officer, received or receives any additional compensation for serving on our board of directors. Mr. Rosen was appointed interim Chief Executive Officer effective April 1, 2015 and, as such, now serves as our executive officer and will receive no additional compensation for continuing to serve on our board of directors, so long as he continues to serve in this capacity.

2014 Director Compensation

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)(2)(3)	Total (\$)
Adrian Adams	66,750	90,517	157,267
Howard B. Rosen	47,500	90,517	138,017
Stephen J. Hoffman Ph.D., M.D. (4)	50,500	90,517	141,017
Richard Afable, M.D.	45,625	90,517	136,142
Mark Wan	51,625	90,517	142,142
Mark G. Edwards	55,000	90,517	145,517

(1) The dollar amount in this column represents the grant date fair value of the stock option award granted to each of the directors. This amount has been calculated in accordance with ASC 718 using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. For a discussion of valuation assumptions, see Note 1 to our financial statements and the discussion under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Estimates—Share-Based Compensation" included in our Annual Report on Form 10-K filed with the SEC on March 13, 2015. These amounts do not necessarily correspond to the actual value that may be recognized from the option award.

(2) On July 24, 2014, the date of our Annual Meeting of Shareholders, each of the following directors was granted an option to purchase 15,000 shares of our Common Stock. The shares subject to these stock options vest as to 1/24th of the shares subject to the option per month on an equal monthly basis over a two-year period.

(3) As of December 31, 2014, the following directors held options to purchase the following number of shares of the Company's common stock: Mr. Adams, 45,000; Mr. Rosen, 42,500; Dr. Hoffman, 42,500; Dr. Afable, 30,000; Mr. Wan, 42,500; Mr. Edwards, 57,500.

(4) AcelRx has received representations from Stephen J. Hoffman, Ph.D. and M.D., and Skyline Venture Partners providing that, so long as Dr. Hoffman remains a consultant of Skyline Venture Partners, the economic benefit of any equity or other compensation received by Dr. Hoffman in connection with his service as a director of AcelRx will be for the benefit of Skyline Venture Partners.



SECURITY OWNERSHIP OF

CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of our common stock as of April 27, 2015 by: (i) each director; (ii) each named executive officer; (iii) all of our executive officers and directors as a group; and (iv) all those known by us to be beneficial owners of more than five percent of our common stock.

	Beneficial Ownership ⁽¹⁾				
Name of Beneficial Owner	Number of Shares	% of Total			
5% Stockholders:					
Funds affiliated with Three Arch Entities ⁽²⁾	9,623,269	21.6%			
Fund affiliated with Skyline Venture Partners ⁽³⁾	3,128,161	7.0%			
Fund affiliated with Alta Partners ⁽⁴⁾	2,378,399	5.4%			
Fund affiliated with Perceptive Advisors LLC ⁽⁵⁾	6,574,060	14.8%			
Named Executive Officers and Directors:					
Richard A. King ⁽⁶⁾	1,224,688	2.7%			
Timothy E. Morris ⁽⁷⁾	62,500	*			
Pamela P. Palmer, M.D., Ph.D. ⁽⁸⁾	1,248,020	2.8%			
Badri Dasu ⁽⁹⁾	318,146	*			
Lawrence G. Hamel ⁽¹⁰⁾	319,422	*			
Adrian Adams ⁽¹¹⁾	106,666	*			
Mark Wan ⁽¹²⁾	9,655,769	21.8%			
Stephen J. Hoffman, Ph.D., M.D. ⁽¹³⁾	32,500	*			
Richard Afable, M.D. ⁽¹⁴⁾	15,375	*			
Howard B. Rosen ⁽¹⁵⁾	75,644	*			
Mark G. Edwards ⁽¹⁶⁾	86,459	*			
James H. Welch	26,670	*			
All executive officers and directors as a group (13 persons) ⁽¹⁷⁾	13,171,859	27.8%			

^{*} Less than 1%.

⁽¹⁾ This table is based upon information supplied by officers, directors and principal stockholders. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, we believe 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 44,335,196 shares outstanding on April 27, 2015, adjusted as required by rules promulgated by the SEC. The number of shares beneficially owned includes shares of common stock issuable pursuant to the exercise of stock options and warrants that are exercisable within 60 days of April 27, 2015. Shares issuable pursuant to the exercise of stock options and warrants that are exercisable within 60 days of April 27, 2015. Shares issuable pursuant to the exercise of stock options and warrants that are exercisable within 60 days of April 27, 2015, and beneficially owned by the person to whom such shares are issuable for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

⁽²⁾ Includes 179,962 shares held by Three Arch Associates III, L.P., 126,153 shares held by Three Arch Associates IV, L.P., 3,347,357 shares held by Three Arch Partners III, L.P. and 5,713,569 shares held by Three Arch Partners IV, L.P. The number also includes 256,228 shares of common stock issuable pursuant to the exercise of stock warrants that are exercisable within 60 days of April 27, 2015. The voting and dispositive decisions with respect to the shares held by Three Arch Associates III, L.P. and Three Arch Partners III, L.P., are made by the following Managing Members of their general partner, Three Arch Management III, L.L.C.: Mark Wan and Wilfred Jaeger, each of whom disclaims beneficial ownership of such shares. The voting and dispositive decisions with respect to the shares held by Three Arch Management IV, L.P. are made by the following Managing Members of their general partner, Three Arch Management III, L.L.C.: Mark Wan and Wilfred Jaeger, each of whom disclaims beneficial ownership of such shares. The voting Managing Members of their general partner, Three Arch Management IV, L.L.C.: Mark Wan and Wilfred Jaeger, each of whom disclaims beneficial ownership of such shares. The address for the funds affiliated with Three Arch Partners is 3200 Alpine Road, Portola Valley, CA 94028.

⁽³⁾ Includes 2,871,933 shares held by Skyline Venture Partners Qualified Purchaser Fund IV, L.P. and 256,228 shares of common stock issuable pursuant to the exercise of stock warrants that are exercisable within 60 days of April 27, 2015. John G. Freund and Yasunori Kaneko are the Managing Members of Skyline Venture Management IV, LLC, which is the general partner of Skyline Venture Partners Qualified Purchaser Fund IV, L.P., and as such Drs. Freund and Kaneko may be deemed to share voting and dispositive power with respect to all shares of common stock held by Skyline Venture Partners Qualified Purchaser Fund IV, L.P. The address for the funds affiliated with Skyline Venture Partners is 525 University Avenue, Ste. 610, Palo Alto, CA 94301.

⁽⁴⁾ The 2,378,399 shares are held by ACP IV, L.P., or ACPIV. ACMP IV, LLC, or ACMPIV, is the general partner of ACPIV. Dan Janney, and Guy Nohra are directors of ACMPIV and they may be deemed to share voting and investment powers with respect to the securities held by ACPIV. Messrs. Janney and Nohra disclaim beneficial ownership of such securities, except to the extent of their pecuniary interest therein. Alta Partners III, Inc. provides investment advisory services to ACPIV. The address for funds affiliated with Alta Partners III, Inc. is One Embarcadero Center, Suite 3700, San Francisco, CA 94111.

- (5) The indicated ownership is based on a Schedule 13G/A filed with the SEC by the reporting persons on February 17, 2015, reporting beneficial ownership as of December 31, 2014. According to the Schedule 13G/A, the reporting persons beneficially own a total of 6,574,060 shares of Common Stock held by a private investment fund to which Perceptive Advisors LLC serves as the investment manager. Mr. Edelman is the managing member of Perceptive Advisors LLC. The Schedule 13G/A filed by the reporting persons provides information only as of December 31, 2014, and, consequently, the beneficial ownership of the above-mentioned reporting persons may have changed between December 31, 2014 and April 27, 2015.
- ⁽⁶⁾ Includes 1,085,427 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (7) Includes 62,500 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (8) Includes 878,005 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (9) Includes 290,616 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (10) Includes 250,420 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (11) Includes 31,666 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (12) Includes 32,500 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015. Mr. Wan, one of our directors, is a managing partner of Three Arch Management III, L.L.C. and Three Arch Management IV, L.L.C., and in such capacities he may be deemed to beneficially own the shares owned by the funds affiliated with Three Arch Partners. Mr. Wan disclaims beneficial ownership of these shares. The address of Mr. Wan is c/o Three Arch Partners, 3200 Alpine Road, Portola Valley, CA 94028.
- (13) Includes 32,500 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- ⁽¹⁴⁾ Includes 14,375 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (15) Includes 71,250 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- ⁽¹⁶⁾ Includes 26,459 shares issuable pursuant to stock options exercisable within 60 days of April 27, 2015.
- (17) Includes 2,775,718 shares issuable pursuant to stock options exercisable and 256,228 shares issuable pursuant to warrants exercisable within 60 days of April 27, 2015.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, requires our directors and executive officers, and persons who own more than ten percent of a registered class of our 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 our company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish us 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 us and written representations that no other reports were required, during the fiscal year ended December 31, 2014, our officers, directors and greater than ten percent beneficial owners complied with all applicable Section 16(a) filing requirements, with the exception of a late Form 4 filed for Dr. Afable in connection with an open market purchase.

EQUITY COMPENSATION PLAN INFORMATION

Equity Compensation Plan Information

The following table provides certain information with respect to our equity compensation plans in effect as of December 31, 2014.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights		Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column A) (2)(3)		
Plan Category	(A)		(B)	(C)		
Equity compensation plans approved by security holders ⁽¹⁾	6,366,763	\$	5.74	485,384		
Equity compensation plans not approved by security holders		\$				
Total	6,366,763			485,384		

(1) Consists of the 2006 Plan, the 2011 Plan and the ESPP.

(2) Consists of shares available for future issuance under the 2011 Incentive Plan, including shares that were previously available for future issuance under the 2006 Plan at the time of the execution and delivery of the underwriting agreement for our IPO, and the ESPP. As of December 31, 2014, 98,366 shares of common stock were available for issuance under the 2011 Incentive Plan and 387,018 shares of common stock were available for issuance under the ESPP.

(3) The initial aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2011 Incentive Plan was 1,875,000 shares, which number was the sum of (i) 51,693 shares remaining available for future grant under the 2006 Plan at the time of the execution and delivery of the underwriting agreement for our IPO, and (ii) an additional 1,823,307 new shares. The number of shares of our common stock reserved for issuance under the 2011 Incentive Plan will automatically increase on January 1st each year, starting on January 1, 2012 and continuing through January 1, 2020, by 4% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, or such lesser number of shares of common stock as determined by our board of directors. The initial aggregate number of shares of our common stock that may be issued pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates under the ESPP was 250,000 shares. The number of shares of our common stock reserved for issuance will automatically increase on January 1st each year, starting January 1, 2012 and continuing through January 1, 2020, in an amount equal to the lower of (i) 2% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, and (ii) a number of shares of common stock as determined by our board of directors.



CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Policy and Procedures for Review of Related Party Transactions

Our audit committee charter provides that the audit committee will review and approve all related party transactions. This review will cover any material transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we were or are to be a participant, and a related party had or will have a direct or indirect material interest, including, purchases of goods or services by or from the related party or entities in which the related party has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related party.

Our related party transactions policy sets forth the procedures for the identification, review, consideration and approval or ratification of transactions involving the Company and its related persons. The policy is designed to prevent transactions between the Company and any of its related persons that may interfere with the performance of the Company's employees' and directors' duties to the Company or deprive the Company of a business opportunity. Any such transactions with related persons may present actual or potential conflicts of interests. However, the Company recognizes that whether or not a conflict exists is often unclear and, in many circumstances, transactions with related persons may, on balance, be beneficial to the Company and its stockholders.

Certain Transactions With or Involving Related Persons

There has not been, nor is there currently proposed, any transaction or series of similar transactions to which the Company was or is to be a party in which the amount involved exceeds \$120,000 and in which any current director, executive officer, holder of more than 5% of our Common Stock or any immediate family member of any of the foregoing persons had or will have a direct or indirect material interest other than compensation arrangements, described under the sections entitled "Executive Compensation" and "Compensation of Directors," other than with respect to the indemnification agreements described below.

Indemnification Agreements

We have entered into indemnification agreements with each of our current directors and officers. These agreements provide for the indemnification of such persons for all reasonable expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were serving in such capacity. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. Furthermore, we have obtained director and officer liability insurance to cover liabilities our directors and officers may incur in connection with their services to us and have increased the level upon the completion of the our IPO.

Other Transactions

We have entered into various employment related agreements and compensatory arrangements with our directors and executive officers that, among other things, provide for compensatory and certain severance and change in control benefits. For a description of these agreements and arrangements, see the sections entitled "Executive Compensation—Employment Agreements and Arrangements" and "Executive Compensation—Director Compensation —Non-Employee Director Compensation" above.



STOCKHOLDER PROPOSALS FOR 2016 ANNUAL MEETING

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by January 1, 2016, to AcelRx's Secretary at 351 Galveston Drive, Redwood City, CA 94063. If you wish to submit a proposal that is not to be included in next year's proxy materials or nominate a director, you must provide specified information to AcelRx's Secretary at 351 Galveston Drive, Redwood City, CA 94063 between February 24, 2016 and March 25, 2016, unless the date of our 2016 Annual Meeting of stockholders is before May 24, 2016 or after July 24, 2016, in which case such proposals shall be submitted no earlier than 120 days prior to the 2016 Annual Meeting of stockholders and no later than the later of (i) 90 days before the 2016 Annual Meeting of stockholders or (ii) ten days after notice of the date of the 2016 Annual Meeting of stockholders is publicly given. You are also advised to review our Bylaws, which contain additional requirements regarding advance notice of stockholder proposals and director nominations.

HOUSEHOLDING OF PROXY MATERIALS

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

This year, a number of brokers with account holders who are AcelRx stockholders will be "householding" the Company's proxy materials. A single set of Notice of Internet Availability of Proxy 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 Notice of Internet Availability of Proxy Materials, please notify your broker or AcelRx. Direct your written request to Secretary, AcelRx Pharmaceuticals, Inc. at 351 Galveston Drive, Redwood City, CA 94063. Stockholders who currently receive multiple copies of the Notices of Internet Availability of Proxy 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/ Adrian Adams

Adrian Adams Chairman

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, AcelRx Pharmaceuticals, Inc. at 351 Galveston Drive, Redwood City, CA 94063.

ACELRX PHARMACEUTICALS, INC 351 GALVESTON DRIVE REDWOOD CTY, CA 94063

VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by our company in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the internet. To sign up for electronic delivery, please follow the instructions above to vote using the internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKSBELOW IN BLUE OR BLACK INK AS FOLLOWS:

	THIS	PROXY CAP	DIS	VALID	ONLY W	HEN SIGNED AND DATED. AND RETURN	THIS PORTION	ON ONLY	
The Board of Directors recommends yo FOR the following:	ou vote		For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.			
1. Election of Directors Nominees			Ο						
01 Adrian Adams	02 Richard Afable,	, M.D.		03 Mar	rk G. Edwards				
The Board of Directors recommends yo	ou vote FOR the following	g proposal:					For	Against	Abst
2 To ratify the selection by the Audi ending December 31, 2015.	it Committee of the Board	d of Directors of I	rnst & Y	oung LLP a	is the indepen	dent registered public accounting firm of the Company for its fiscal year		Ο	C
NOTE: Such other business as may prop	perly come before the me	eting or any adjo	urnment	thereof.					
			Yes	No					
Please indicate if you plan to attend the	s meeting		Yes	№					
Please indicate if you plan to attend the Please sign exactly as your name(s) app other fiduciary, please give full title as s If a corporation or partnership, please s	ear(s) hereon. When sign	ing as attorney, each sign persor itnership name,	ally. All I	administra	ator, or st sign. er.		_		
Please sign exactly as your name(s) app other fiduciary, please give full title as s	ear(s) hereon. When sign	ing as attorney, each sign persor rtnership name,	ally. All I	administra	altor, or ust sign. er.				

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Annual Report, Notice & Proxy Statement is/ are available at www.proxyvote.com.

ACELRX PHARMACEUTICALS, INC. Annual Meeting of Stockholders June 23, 2015 12:00 PM This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Howard B. Rosen and Timothy E. Morris, or either of them, as proxies, each with the power to appoint (his/her) substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common stock of ACELRX PHARMACEUTICALS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholder(s) to be held at 12:00 PM, PDT on June 23, 2015, at the Corporate Headquarters at 351 GALVESTON DRIVE, REDWOOD CITY, CA 94063, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side

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