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

#### 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   □						
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 Registr	rant)					
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#### PRELIMINARY COPY—SUBJECT TO COMPLETION

#### ACELRX PHARMACEUTICALS, INC.

25821 Industrial Boulevard, Suite 400 Hayward, CA 94545 650-216-3500

#### NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On July 15, 2022

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of **ACELRX PHARMACEUTICALS**, **INC.**, a Delaware corporation. The meeting will be held on Friday, July 15, 2022 at 10:00 a.m. Pacific Daylight Time virtually via the Internet at <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a>, or the Annual Meeting, originating from Hayward, California. **You will not be able to attend the Annual Meeting in person.** At the Annual Meeting, you will be asked to consider and vote upon the following proposals:

- To elect the three nominees named in the accompanying proxy statement as Class II directors, to hold office until the 2025 Annual Meeting of Stockholders.
- 2. To ratify the appointment of WithumSmith+Brown, PC as our independent registered public accounting firm for the year ending December 31, 2022.
- **3.** To approve, on an advisory basis, the compensation of our named executive officers.
- 4. To approve an amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 200 million to 300 million shares.
- 5. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the proxy statement that accompanies this notice.

In accordance with rules established by the Securities and Exchange Commission, we are providing you access to our proxy materials over the Internet. Accordingly, we plan to mail a Notice of Internet Availability of Proxy Materials, or the Notice, to our stockholders on or about June, 2022. The Notice will describe how to access and review our proxy materials, including our proxy statement and annual report on Form 10-K. The Notice as well as the printed copy of proxy cards will also describe how you may submit your proxy via the Internet or by telephone. If you received a Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting such materials included in the Notice. In accordance with Delaware law, a list of stockholders entitled to vote at the Annual Meeting will be available in electronic form during the Annual Meeting at the following URL: <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a> and will be accessible during normal business hours for ten days prior to the Annual Meeting at our principal place of business, 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545.

The record date for the Annual Meeting is May 25, 2022. Only stockholders of record at the close of business on that date are entitled to receive notice of and to vote at the Annual Meeting or any postponement or adjournment thereof. Instructions on how to participate in the Annual Meeting and demonstrate proof of stock ownership are posted at <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a>. The webcast of the Annual Meeting will be archived for one year after the date of the Annual Meeting at <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a>. Whether or not you plan to attend the Annual Meeting, please vote as soon as possible.

By Order of the Board of Directors	
Adrian Adams	
Chairman	

Hayward, California June , 2022

Important Notice Regarding the Availability of Proxy Materials for the Stockholders' Meeting to Be Held on Friday, July 15, 2022 at 10:00 a.m. Pacific Daylight Time.

The proxy statement, notice and annual report to stockholders are available at <a href="https://www.proxyvote.com">www.proxyvote.com</a>.

Whether or not you expect to attend the Annual Meeting, please vote by telephone or the Internet as instructed in these materials, or if you request or we deliver to you a proxy card in the mail, you may complete, date, sign and return that proxy. Regardless of the method used, please vote as promptly as possible in order to ensure your representation at the Annual Meeting. You may also vote through our virtual web conference if you attend the Annual Meeting, even if you have voted by proxy.

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#### ACELRX PHARMACEUTICALS, INC.

25821 Industrial Boulevard, Suite 400 Hayward, CA 94545 650-216-3500

# PROXY STATEMENT FOR THE 2022 ANNUAL MEETING OF STOCKHOLDERS

#### **OUESTIONS 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, or 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, or the Notice, because the Board of Directors, or the Board, of AcelRx Pharmaceuticals, Inc., is soliciting your proxy to vote at the 2022 Annual Meeting of Stockholders, or the Annual Meeting, 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 June, 2022 to all stockholders 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 June , 2022.

#### How do I attend the Annual Meeting?

Stockholders as of the record date and/or their authorized representatives are permitted to attend our Annual Meeting. The Annual Meeting will be held on Friday, July 15, 2022 at 10:00 a.m. Pacific Daylight Time virtually via the Internet at <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a>. Instructions on how to participate in the Annual Meeting and demonstrate proof of stock ownership are posted at <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a>. You will not be able to attend the Annual Meeting in person.

#### Why a Virtual-Only Online Meeting?

In light of the continuing coronavirus pandemic and fluctuating limitations on gatherings instituted by local and state government officials, we will conduct the Annual Meeting virtually via the Internet to facilitate stockholder attendance and participation. The virtual format for the Annual Meeting will enhance stockholder access by allowing our stockholders to participate fully, and equally, from any location around the world at no cost. Stockholder rights are not affected. The virtual meeting format will enhance, rather than constrain, stockholder access, participation, and communication because the online format allows stockholders to communicate with us during the Annual Meeting so they can ask questions of our Board, management, and a representative from our independent registered public accounting firm. During the live Q&A session, we will answer appropriate questions as they come in, as time permits. We will re-assess the benefits of a virtual-only meeting in the future once the coronavirus pandemic subsides. Given the above listed factors, and the fact that no stockholders attended our physical 2020 annual meeting, we feel a virtual-only meeting is the right choice for AcelRx and its stockholders at this time.

#### What happens if there are technical difficulties during the Annual Meeting?

We will have technicians ready to assist you with any technical difficulties you may have accessing the virtual Annual Meeting, voting at the Annual Meeting or submitting questions at the Annual Meeting. If you encounter any difficulties accessing the virtual Annual Meeting during the checkin or meeting time, please refer to the technical support information located on the login screen at <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a>.

#### Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on May 25, 2022 will be entitled to vote at the Annual Meeting. On this record date, there were shares of common stock outstanding and entitled to vote. Each share of common stock is entitled to one vote on each matter to be voted on.

Stockholder of Record: Shares Registered in Your Name

If on May 25, 2022 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 by proxy or vote at the Annual Meeting by going to www.virtualshareholdermeeting.com/ACRX22 and following the instructions regarding voting. Whether or not you plan to attend the Annual 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 May 25, 2022 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. Beneficial holders who attend the Annual Meeting may also vote during the Annual Meeting by going to <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a> and following the instructions regarding voting.

#### What am I voting on?

There are four matters scheduled for a vote:

- Election of the three Class II directors named in this proxy statement (Proposal 1);
- Ratification of the appointment of WithumSmith+Brown, PC as our independent registered public accounting firm for the year ending December 31, 2022 (Proposal 2);
- Advisory vote to approve the compensation of our named executive officers (Proposal 3); and
- Approval of an amendment to our Amended and Restated Certificate of Incorporation, to increase the number of authorized shares of common stock from 200 million shares to 300 million shares (Proposal 4).

#### What are the Board's voting recommendations?

A summary of the Annual Meeting proposals is below. Every stockholder's vote is important. Our Board urges you to vote your shares FOR each of the proposals.

<u>Matter</u>	<u>Page</u>	Board Recommends	Vote Required for Approval	Effect of Abstentions	Effect of Broker Non- Votes
Election of three directors	6	FOR each director nominee	More FOR than WITHHOLD votes	None	None
Ratification of selection of WithumSmith+Brown, PC as our independent registered public accounting firm for the year ending December 31, 2022	9	FOR	Majority of shares present	Against	N/A
Advisory approval of our executive compensation	11	FOR	Majority of shares present	Against	None
Approval of an amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 200 million to 300 million shares	13	FOR	Majority of shares outstanding	Against	N/A

#### What if another matter is properly brought before the Annual Meeting?

The Board 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 or you may "Withhold" your vote for any nominee you specify. For 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 stockholder of record, you may vote at the Annual Meeting by going to www.virtualshareholdermeeting.com/ACRX22 and following the instructions regarding voting or vote by proxy (i) over the telephone, (ii) through the Internet or (iii) 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 Annual Meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the Annual Meeting and vote by going to www.virtualshareholdermeeting.com/ACRX22 and following the instructions regarding voting even if you have already voted by proxy.

- To vote at the Annual Meeting, go to www.virtualshareholdermeeting.com/ACRX22 and follow the instructions regarding voting.
- 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 1-800-690-6903 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., Eastern Daylight Time on July 14, 2022 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., Eastern Daylight Time on July 14, 2022 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 AcelRx. Simply follow the voting instructions in the Notice to ensure that your vote is counted. Beneficial holders who attend the Annual Meeting may also vote during the Annual Meeting by going to <a href="https://www.virtualshareholdermeeting.com/ACRX22">www.virtualshareholdermeeting.com/ACRX22</a> and following the instructions regarding voting.

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 May 25, 2022.

What if I do not vote, or if I return a proxy card or otherwise vote without giving specific voting instructions, what happens?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote through the Internet, by telephone, by completing a proxy card that may be delivered to you, or at the Annual Meeting, your shares will not be voted. If you return a signed and dated proxy card without giving specific voting instructions, then the proxy holders will vote your shares in the manner recommended by the Board 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.

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, the organization that holds your shares may still be able to vote your shares in its discretion. In this regard, under the rules of the New York Stock Exchange, or NYSE, brokers, banks and other securities intermediaries that are subject to NYSE rules may use their discretion to vote your "uninstructed" shares with respect to matters considered to be "routine" under NYSE rules, but not with respect to "non-routine" matters. Accordingly, 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 all proposals.

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

If the beneficial owner does not provide voting instructions, such beneficial owner's 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.

The ratification of the appointment of WithumSmith+Brown, PC as our independent registered public accounting firm for the year ending December 31, 2022 (Proposal 2) and the approval of an amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock (Proposal 4) are considered to be routine matters.

The election of directors (Proposal 1) and the advisory vote on the compensation of our named executive officers (Proposal 3) are matters considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore we expect broker non-votes on Proposals 1 and 3.

#### 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. Certain of our directors, officers and employees may participate in the solicitation of proxies, including electronically or by mail or telephone, without additional compensation.

#### 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 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545.
- You may attend the Annual Meeting *and* vote. 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 proposals, votes "For" and "Against" and abstentions. Broker non-votes have no effect and will not be counted towards the vote total for the Proposals.

#### 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 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 four proposals, the ratification of the selection by the Audit Committee of the Board of WithumSmith+Brown, PC as our independent registered accounting firm for the year ending December 31, 2022 (Proposal 2), and the approval of an amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock (Proposal 4), are "routine" matters. The other three proposals are "non-routine."

#### 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 shares outstanding and entitled to vote. Thus, the holders of 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 at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the Chairman of the Board or 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.

#### When are stockholder proposals and director nominations due for next year's Annual Meeting?

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by February 3, 2023 to AcelRx's Secretary at 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545. 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 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545 between March 17, 2023 and April 16, 2023, unless the date of our 2023 annual meeting of stockholders is before June 15, 2023 or after August 14, 2023, in which case such proposals shall be submitted no earlier than 120 days prior to the 2023 annual meeting of stockholders and no later than the later of (i) 90 days before the 2023 annual meeting of stockholders or (ii) ten days after notice of the date of the 2023 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.

#### PROPOSAL 1

#### **ELECTION OF DIRECTORS**

#### CLASSIFIED BOARD

Our Board is divided into three classes, each of which 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.

The Board presently has nine members. There are three directors in the class whose term of office expires in 2022. All of the nominees are current directors of AcelRx. Each of the nominees listed below were previously elected by the stockholders. If elected at the Annual Meeting, each of these nominees would serve until the 2025 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. Each director is expected to attend the Annual Meeting in accordance with our Corporate Governance Guidelines.

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 three 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 be voted for the election of a substitute nominee proposed by AcelRx. Each person nominated for election has agreed to serve if elected. Our management has no reason to believe that any of the nominees will be unable to serve.

The following is a brief biography of each nominee. 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 of the Board, and the Board to conclude, as of the date of this proxy statement, that each nominee for Class II director should continue to serve as a director.

#### CLASS II NOMINEES FOR ELECTION FOR A THREE-YEAR TERM EXPIRING AT THE 2025 ANNUAL MEETING

Vincent J. Angotti, age 54, has served as our director and Chief Executive Officer since March 2017. From 2015 to 2016, Mr. Angotti was Chief Executive Officer and Director of XenoPort, Inc., a biopharmaceutical company that was acquired by Arbor Pharmaceuticals, LLC in 2016. Prior to that, from 2008 to 2015, Mr. Angotti held various roles at Xenoport, including Executive VP and Chief Operating Officer from 2012 to 2015, and Senior Vice President and Chief Commercialization Officer from 2008 to 2012. Prior to joining XenoPort, from 2001 to 2008, Mr. Angotti held several senior sales and marketing positions at Reliant Pharmaceuticals, Inc., a pharmaceutical company that was acquired by GlaxoSmithKline in 2007, the most recent of which was senior vice president of sales and marketing. Mr. Angotti began his career in the life sciences industry at Novartis Pharmaceuticals Corp., where he worked from 1991 until 2001 in sales and operations positions, most recently as executive director, field operations. He holds a B.S. with a concentration in Business Management from Cornell University and an M.B.A. with honors from Columbia University. Mr. Angotti's role as our Chief Executive Officer, his business expertise and his prior leadership roles in pharmaceutical companies provides him with the qualifications and skills to serve as a director.

Stephen J. Hoffman, M.D., Ph.D., age 68, has served as our director since February 2010. Dr. Hoffman served as Chief Executive Officer and Director of Aerpio Pharmaceuticals, Inc., from December 2017 to October 2019. Prior to that, Dr. Hoffman had been a Senior Advisor to PDL BioPharma, Inc. beginning in 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. From 1994 to 2012, Dr. Hoffman served as President, Chief Executive Officer and a director of Allos Therapeutics, a biopharmaceutical company; and served as chairman of the board of directors from 2002 until its acquisition by Spectrum Pharmaceuticals in 2012. Dr. Hoffman currently serves on the board of directors of Dicerna Pharmaceuticals, Inc. and Palleon Pharmaceuticals, Inc. Dr. Hoffman holds a Ph.D. in 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 59, has served as our director and Chief Medical Officer since she co-founded the company in July 2005. 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 previously been a consultant to Omeros Corporation, a biopharmaceutical company she co-founded 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.

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

Set forth below is a brief biography of each continuing director comprising 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 I DIRECTORS CONTINUING IN OFFICE UNTIL THE 2024 ANNUAL MEETING

Adrian Adams, age 71, has served as our Chairman since February 2013. Since January 2020, Mr. Adams has also served as Chairman of the board of directors of Impel Pharmaceuticals, Inc., a private specialty pharmaceutical company, and in May 2020 he took on the additional role of Chief Executive Officer. In addition, Mr. Adams has served as Chairman of the board of directors of Akebia Therapeutics, Inc., a specialty publicly traded pharmaceutical company, since December 2018. Previously, Mr. Adams served as Chief Executive Officer of Aralez Pharmaceuticals, Inc., a specialty pharmaceutical company, after the merger between Pozen, Inc. and Tribute Pharmaceuticals Canada, Inc. in February 2016 to January 2019 and served as a member of the board of directors from February 2016 to April 2019. Prior to that, from May 2015 to January 2016, Mr. Adams served as Chief Executive Officer and a member of the board of directors of Pozen, Inc. 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 68, has served as our director since December 2013. Dr. Afable has served as trustee of Chapman University since March 2017, of Providence St. Joseph Health since January 2018, and he is the immediate past chair of the California Hospital Association. From July 2016 through December 2017, Dr. Afable has served as Executive Vice President and Chief Executive, Southern California, for Providence St. Joseph Health. From February 2013 to July 2016, Dr. Afable served as 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 and an M.D. from Loyola University of Chicago, and a Master's 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.

Jill Broadfoot, age 61, has served as our director since November 2021. Ms. Broadfoot currently serves as the Chief Financial Officer of aTyr Pharma, Inc., a position she has held since July 2018. From January 2017 to July 2018, Ms. Broadfoot served as Chief Financial Officer of Emerald Health Pharmaceuticals Inc. and Emerald Health Bioceuticals Inc., where she was responsible for establishing operations for the U.S.-based pharmaceutical and bioceutical entities as well as the establishment of operations, corporate governance, finance and accounting and investor relations functions, among others. Prior to Emerald Health, Ms. Broadfoot served as Vice President, U.S. Corporate Controller at GW Pharmaceuticals, from May 2016 to January 2017. While at GW Pharmaceuticals, her responsibilities included establishing U.S. commercial operations and implementing U.S. public company financial and accounting standards in connection with the transfer of corporate operations from the U.K. to the U.S. Prior to joining GW Pharmaceuticals, Ms. Broadfoot served as Chief Financial Officer of Vical Inc., from October 2004 to March 2013, where she had oversight of finance, investor relations, manufacturing, information technology, human resources, and business development. Prior to that, Ms. Broadfoot held various positions at DJO Global, Inc., most recently as Vice President of Finance, and served as an audit manager at Ernst & Young LLP. Ms. Broadfoot is a member of the board of directors of Otonomy, Inc., a publicly traded biopharmaceutical company. Ms. Broadfoot holds a B.S. in Business Administration and Accounting from San Diego State University and is a Certified Public Accountant (Inactive). Ms. Broadfoot's financial and business expertise, including her diversified background in finance, operations and business development, provides her with the qualifications and skills to serve as a director.

#### CLASS III DIRECTORS CONTINUING IN OFFICE UNTIL THE 2023 ANNUAL MEETING

Marina Bozilenko, age 57, has served as our director since March 2021. Since June 2021, Ms. Bozilenko has served as President, Chief Executive Officer and a member of the board of directors at Biothea Pharma, Inc., a private biotechnology company, and since February 2021, she has served as a Strategic Advisor to William Blair & Company, L.L.C., a financial services company she joined in January 2010 as Managing Director/Partner and Head of Biotechnology and Pharma. Ms. Bozilenko also currently serves as a member of the board of directors at SynAct Pharma AB, a publicly traded biotechnology company listed on the Spotlight Stock Market, a role she has held since April 2021. Prior to her position at William Blair, Ms. Bozilenko was a Principal at Kidd & Company, LLC, an investment firm, between August 2008 and January 2010. Prior to Kidd & Company, Ms. Bozilenko was Senior Managing Director at Bear, Stearns & Co. Inc., an investment bank, from April 2003 to January 2008, Managing Director at Banc of America Securities, LLC, an investment bank, between March 2000 and April 2003, Managing Director and Head of West Coast Healthcare Investment Banking at Prudential Vector Health Care Group, a brokerage firm, between July 1999 and March 2000, and held multiple positions of increasing responsibility including Managing Director and Head of West Coast at Vector Securities International, Inc., a brokerage firm, between March 1988 and July 1999. Between January 2010 and March 2020, Ms. Bozilenko served on the board of directors of Olema Pharmaceuticals, Inc., a clinical-stage biopharmaceutical company. Ms. Bozilenko received her B.A. in Molecular Biology and Biochemistry and M.A. in Economic History from the University of Chicago. Ms. Bozilenko's financial and business expertise, including her diversified background in finance and business development, provides her with the qualifications and skills to serve as a director.

Howard B. Rosen, age 64, served as our Chief Executive Officer from April 1, 2016 until March 5, 2017, as our interim Chief Executive Officer from April 1, 2015 until March 31, 2016, 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 treatments for 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 also currently a member of the board of directors of Kala Pharmaceuticals, Inc., a publicly traded biotechnology company, Aria Pharmaceuticals, Inc., Hopewell Therapeutics, Inc. and FireCyte Therapeutics, Inc., all of which are private biotechnology companies, Entrega, Inc., a private technology company, and Hammerton, Inc., a decorative lighting company. In addition, Mr. Rosen is a trustee of the National Academy of Engineering Foundation. Mr. Rosen previously served as chairman of the board of directors of Alcobra, Ltd., a public pharmaceutical company, from 2014 through 2017. 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 a

Mark Wan, age 57, has served as our director since August 2006. Mr. Wan is a founding managing director of Causeway Media Partners, a private investment firm, which was founded in 2013. Prior to Causeway, he was 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 Athlon Acquisition Corp., a blank check company. Between July 2013 and December 2020, Mr. Wan served on the board of directors of QT Vascular Ltd., a public Singapore-based medical device company. 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 APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has selected WithumSmith+Brown, PC, or Withum, as our independent registered public accounting firm for the year ending December 31, 2022 and further that management submit the selection of its independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Representatives of Withum are expected to attend the Annual Meeting via the live webcast. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither our amended and restated bylaws nor other governing documents or law require stockholder ratification of the selection of Withum as our independent registered public accounting firm. However, the Board is submitting the selection of Withum to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Board will reconsider whether or not to retain that firm. Even if the selection is ratified, 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 our best interests and of our stockholders.

#### CHANGE IN INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

On July 15, 2021, we were formally notified that OUM & Co. LLP, OUM, combined its practice with Withum and, as a result of such transaction, OUM effectively resigned as our independent registered public accounting firm on such date. Pursuant to certain terms of the transaction, OUM combined its operations with Withum operations and certain professional staff and partners of OUM joined Withum as employees or partners.

On July 16, 2021, with the approval of our Audit Committee, Withum was engaged as our independent registered public accounting firm for the quarterly periods ending June 30, 2021 and September 30, 2021, and for the year ending December 31, 2021.

During the years ended December 31, 2020 and 2019, and during the interim period from December 31, 2020 through July 15, 2021, the date of resignation, there were no disagreements with OUM on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedures, which disagreements, if not resolved to the satisfaction of OUM, would have caused it to make reference to such disagreement in its reports.

The report of OUM regarding our consolidated financial statements for the year ended December 31, 2020 did not contain any adverse opinion or disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principles.

Prior to engaging Withum, neither we nor anyone on our behalf consulted with Withum regarding (i) the application of accounting principles to a specified transaction, either completed or proposed, or on the type of audit opinion that might be rendered by Withum on our consolidated financial statements, or (ii) any matter that was either the subject of a disagreement (as defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a reportable event (as described in Item 304(a)(1)(v) of Regulation S-K), and Withum did not provide any written report or oral advice that was an important factor considered by us in reaching a decision as to any such accounting, auditing or financial reporting issue.

We previously provided OUM with a copy of the disclosures regarding this change in independent registered public accounting firm reproduced in this Proxy Statement and we received a letter from OUM addressed to the SEC stating that they agree with the above statements. A copy of this letter was filed as an exhibit to our Current Report on Form 8-K filed with the SEC on July 29, 2021.

#### FEES BILLED BY INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM 2021 AND 2020

As described above, on July 15, 2021, OUM combined its operations with the operations of Withum and certain professional staff and partners of OUM joined Withum as employees or partners. The following tables present the aggregate fees billed by OUM and Withum to us for the years ended December 31, 2021 and 2020.

OUM & Co. LLP

	Year Ended December 31,				
	 2021		2020		
Audit Fees(1)	\$ 87,075	\$	609,155		
Audit-Related Fees	_		_		
Tax Fees	_		_		
All Other Fees	_		_		
Total Fees	\$ 87,075	\$	609,155		

<sup>(1)</sup> Audit Fees. Consists of fees for professional services rendered for the audit of our consolidated financial statements for the year ended December 31, 2020 and review of our condensed consolidated financial statements for the first interim period of 2021. Fees also consist of review of interim condensed consolidated financial statements and fees for assistance with registration statements filed with the SEC, comfort letters and services that are normally provided in connection with statutory and regulatory filings or engagements for 2021 and 2020.

	Year Ended	Decen	ıber 31,
	 2021		2020
Audit Fees(1)	\$ 508,000	\$	
Audit-Related Fees	_		_
Tax Fees	_		_
All Other Fees	_		_
Total Fees	\$ 508,000	\$	

<sup>(1)</sup> Audit Fees. Consists of fees for professional services rendered for the audit of our consolidated financial statements, review of interim condensed consolidated financial statements and fees for assistance with registration statements filed with the SEC, comfort letters and services that are normally provided by Withum in connection with statutory and regulatory filings or engagements for 2021.

#### PRE-APPROVAL POLICIES AND PROCEDURES

Our Audit Committee pre-approves all audit and permissible non-audit services provided by our independent registered public accounting firm. 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.

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

#### PROPOSAL 3

#### Advisory Vote on Executive Compensation

At the 2019 Annual Meeting of Stockholders, the stockholders indicated their preference that we solicit a non-binding advisory vote on the compensation of the named executive officers, commonly referred to as a "say-on-pay vote," every year. The Board has adopted a policy that is consistent with that preference. In accordance with that policy, this year, we are again asking the stockholders to approve, on an advisory basis, the compensation of our named executive officers as disclosed in this proxy statement in accordance with SEC rules.

This vote is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement. The compensation of our named executive officers subject to the vote is disclosed in the compensation tables, and the related narrative disclosure contained in this proxy statement. As discussed in those disclosures, we believe that our compensation policies and decisions are focused on pay-for-performance principles, strongly aligned with our stockholders' interests and consistent with current market practices. Compensation of our named executive officers is designed to enable the us to attract and retain talented and experienced executives to lead us successfully in a competitive environment. We believe the mix of fixed and performance-based compensation, the terms of our cash bonus plan and the terms of long-term incentive compensation are all designed to enable AcelRx to attract and maintain top talent while, at the same time, creating a close relationship between performance and compensation. The Compensation Committee, and the Board believe that the design of the program, and hence the compensation awarded to our named executive officers under the current program, fulfills this objective.

The Compensation Committee actively reviews and assesses our executive compensation program in light of the highly competitive employment environment in the San Francisco Bay Area, the challenge of recruiting, motivating and retaining executive officers in an industry with much longer business cycles than other commercial industries, and evolving compensation governance and best practices. In reconciling these areas, the Compensation Committee strives to act in the long-term best interests of AcelRx and our stockholders and believes that AcelRx's executive compensation programs are strongly aligned with the long-term interests of our stockholders. In determining whether to approve this proposal, the Compensation Committee believes that stockholders should consider the following:

- Emphasis on Pay for Performance. For 2021, a significant portion of our executive officers' total compensation was variable and at risk and tied directly to our measurable performance. The Compensation Committee believes that this structure, which puts a considerable proportion of executive officers' total compensation "at risk," contingent on appreciation of our common stock, achievement of specific corporate goals, and continued employment, strongly aligns the interests of our executive officers with those of our stockholders, ties their compensation to the most concrete measure of performance against critical corporate goals and promotes retention.
- Peer Group Positioning. The Compensation Committee utilizes an independent compensation consultant to assess our executive compensation program, including total compensation and individual compensation elements, against peer group market data. For 2021, in consultation with our independent compensation consultant, Radford, an Aon Company, the Compensation Committee chose a peer group consisting of similarly-sized companies at a similar stage of development, of similar complexity, and comparable financial characteristics, with whom we may compete for talent. The Compensation Committee generally targeted our named executive officers' 2021 base salary, annual incentive bonuses and employee benefits elements of our executives' compensation to be at or near the 50th percentile of our peer group, and the long-term equity incentive element of our executives' compensation to be at or near the 75th percentile of our peer group based on a percent of company basis.
- Equity is a Key Component of Compensation and Aligns our Compensation Programs with the Long-Term Interests of our Stockholders. Our option awards granted in 2021 only provide value as the market price of our stock increases and if the executive officer provides us with continuous services. Our restricted stock unit awards granted in 2021 provide value if the executive officer provides us with continuous services. Therefore, these awards strongly align our executive officers' interests with those of our stockholders by providing a continuing financial incentive to maximize long-term value, maintain the competitiveness of our executive officers' total compensation opportunity and encourage our executive officers to remain in the long-term employ of AcelRx.
- *Limited Personal Benefits*. Our executive officers are eligible for the same benefits as non-executive, salaried employees, and do not receive any personal benefits.

- No Tax Gross-Ups on Compensation. None of our executive officers receive tax related gross-ups on any element of compensation.
- No Single-Trigger Change in Control Cash Benefits. We do not provide cash severance benefits to our executives upon a change of control, absent an actual termination of employment. We only provide single trigger vesting acceleration if unvested equity awards are not assumed by an acquirer in a change of control.
- No Pension Plans, Post-Retirement Health Plans or Supplemental Deferred Compensation or Retirement Benefits. We do not offer any
  pension plans or post-retirement health benefits or provide our executive officers with any supplemental deferred compensation or
  retirement benefits.

Accordingly, the Board is asking the stockholders to indicate their support for the compensation of the Company's named executive officers as described in this proxy statement by casting a non-binding advisory vote "FOR" the following resolution:

"RESOLVED, that the compensation paid to the Company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K is hereby APPROVED."

Because the vote is advisory, it is not binding on the Board or AcelRx. Nevertheless, the views expressed by the stockholders, whether through this vote or otherwise, are important to management and the Board and, accordingly, the Board and the Compensation Committee intend to consider the results of this vote in making determinations in the future regarding executive compensation arrangements.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 3.

#### PROPOSAL 4

## APPROVAL OF AN AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK FROM 200 MILLION TO 300 MILLION SHARES

For purposes of this Proposal 4, the term "Proposed Amendment" refers to an amendment and restatement of our Certificate of Incorporation.

#### **Description of the Proposed Amendment**

Our Certificate of Incorporation authorizes the issuance of up to 200 million shares of common stock, par value \$0.001 per share, and 10 million shares of preferred stock, par value \$0.001 per share.

In May 2022, our Board adopted resolutions approving an amendment to the Certificate of Incorporation to increase the number of authorized shares of common stock from 200 million shares to 300 million shares. Our Board is recommending the proposed increase in the number of authorized shares of common stock to provide adequate shares of common stock for general corporate purposes, as further described below. The Board determined that the Proposed Amendment is advisable and in the best interests of the Company and directed that the proposed Amendment be submitted for adoption and approval by stockholders at the Annual Meeting.

The full text of the Proposed Amendment is set forth in **Appendix A** to this proxy statement. The Proposed Amendment would not affect the number of authorized shares of preferred stock. Currently, there are no shares of preferred stock issued and outstanding.

#### Purposes and Effect of the Proposed Amendment and Effect of Stockholder Approval

As of May 25, 2022, we have shares of common stock outstanding and the number of authorized shares of our common stock is 200 million. Following the filing of the Proposed Amendment, the number of authorized shares of our common stock will be increased to 300 million.

If our stockholders adopt and approve the Proposed Amendment, the Proposed Amendment will become effective on the date that it is filed with the Secretary of State of the State of Delaware. If the Proposed Amendment is adopted and approved by the stockholders, we currently anticipate filing the Proposed Amendment with the Secretary of State of the State of Delaware on or around, July 18, 2022. If the Proposed Amendment is not adopted and approved by the stockholders or is subsequently abandoned by the Board, the Proposed Amendment will not be filed with the Secretary of State of the State of Delaware and our authorized number of shares of common stock will remain at 200 million. Further, if the Board subsequently determines not to proceed with the filing of the Proposed Amendment, it will not be filed with the Secretary of State of the State of Delaware even if it is approved by stockholders.

As a general matter, the increase in our authorized but unissued shares of common stock as a result of the Proposed Amendment would enable the Board to issue additional shares of common stock in its discretion from time to time for general corporate purposes, including, but not limited to, expanding our business through mergers and acquisitions; stock dividends and/or stock splits; providing equity incentives to employees, officers or directors; and the raising of additional capital. Such issuances would occur without further action or approval of our stockholders and would be subject to and limited by any rules or listing requirements of Nasdaq or of any other applicable rules or regulations. Except for shares of common stock reserved for grant(s) pursuant to our equity compensation plans, we do not currently have any other plans, agreements, commitments or understandings with respect to the issuance of the additional shares (or the currently authorized but unissued shares) of common stock, nor do we currently have any plans, arrangements, commitments or understandings with respect to the issuance of any shares of preferred stock.

Failure by the stockholders to approve the Proposed Amendment would reduce the ability of the Board to take the potential future actions to issue additional common stock discussed above.

Any additional authorized shares of common stock, if and when issued, would be part of our existing class of common stock, and would have the same rights and privileges as the currently outstanding shares of common stock. The holders of common stock are not entitled to preemptive rights or cumulative voting.

To assist our stockholders in evaluating the merits of this Proposal 4, our outstanding, reserved, and authorized shares of common stock prior to approval of this Proposal 4 are as follows as of May 25, 2022:

- 1. Shares of common stock outstanding
- 2. Shares reserved for issuance pursuant to outstanding warrants
- 3. Shares reserved for issuance pursuant to Lowell Therapeutics, Inc. acquisition

1,396,526

- Equity awards outstanding and shares reserved for future issuance under our equity incentive plans and employee stock purchase plan
- 5. Aggregate shares of common stock outstanding and reserved for issuance (sum of rows 1, 2, 3 and 4)
- 6. Shares of common stock authorized by our Charter PRIOR to approval of Proposal 4

200,000,000

Although, at present, the Board has no other plans to issue the additional shares of common stock other than through the Controlled Equity Offering with Cantor Fitzgerald & Co., it desires to have the shares available to provide additional flexibility to use its capital stock for business and financial purposes in the future. The additional shares may be used for various purposes without further shareholder approval. These purposes may include, but are not limited to, raising capital; providing equity incentives to employees, officers or directors; establishing strategic relationships with other companies; expanding our business or product lines through the acquisition of other businesses or products; and other purposes. Such issuances would occur without further action or approval of our stockholders and would be subject to and limited by any rules or listing requirements of Nasdaq or of any other applicable rules or regulations. Except for shares of common stock reserved for grant(s) pursuant to our equity incentive plans and employee stock purchase plan, we do not currently have any other plans, agreements, commitments or understandings with respect to the issuance of the additional shares (or the currently authorized but unissued shares) of common stock, nor do we currently have any plans, arrangements, commitments or understandings with respect to the issuance of preferred stock.

#### **Effective Date of the Proposed Amendment**

If the Proposed Amendment is adopted by the required vote of stockholders, it will become effective on the date the Proposed Amendment is filed with the Secretary of State of the State of Delaware, which we anticipate will be on or around July 18, 2022.

#### Reservation of Right to Abandon Proposed Amendment

Our Board reserves the right to not proceed with the Proposed Amendment and to abandon the Proposed Amendment without further action by our stockholders at any time before the effectiveness of the filing of the Proposed Amendment with the Secretary of State of the State of Delaware, even if the Proposed Amendment is adopted and approved by our stockholders at the Annual Meeting. By voting in favor of the Proposed Amendment, you are expressly also authorizing our Board to delay, not proceed with, and abandon, the Proposed Amendment if it should so decide, in its sole discretion, that such action is in the best interests of our Company and its stockholders. If the Board elects to abandon the Proposed Amendment, the number of authorized shares of common stock will remain at 200 million.

#### **Vote Required**

The affirmative vote of the holders of a majority of the outstanding shares of the common stock will be required to approve the Proposed Amendment. Because Proposal 4 is considered "routine" for these purposes, there will not be any broker non-votes for this Proposal 4 and Abstentions will have the same effect as "Against" votes.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 4.

#### 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. 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 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 determined that all of our directors, other than Mr. Angotti, our Chief Executive Officer, and Dr. Palmer, our Chief Medical Officer, 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. 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 has a Chairman, Mr. Adams, 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. We believe 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 AcelRx. 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.

#### COMPOSITION OF THE BOARD

Our Board and the Nominating and Corporate Governance Committee are committed to ensuring that the Board is comprised of a highly capable group of directors who collectively provide a significant breadth of experience, knowledge and ability to effectively represent the interest of stockholders, drive stockholder value and reflect our corporate values of integrity, honesty and adherence to high ethical standards. The following charts illustrate the tenure, experience and diversity of our current directors.





Board Diversity Matrix (As of May 16, 2022)								
Total Number of Directors			9					
	Female	Gender Undisclosed						
Part I: Gender Identity								
Directors	3	6						
Part II: Demographic	Background							
African American or Black								
Alaskan Native or American Indian								
Asian or Asian Indian		1						
Hispanic or Latinx								
Native Hawaiian or Pacific Islander								
White	3	4						
Two or More Races or Ethnicities		1						
LGBTQ+		·	-					
Did Not Disclose Demographic Background			-					

#### ROLE OF THE BOARD OF DIRECTORS 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 commercial. 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 commercialization, compliance matters, business development efforts, and 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 AcelRx. 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 met six times in 2021 and acted by unanimous written consent seven times. Each director attended or participated in 75% or more of the aggregate of (i) the total number of meetings of the Board and (ii) the total number of meetings held by all committees of the Board on which such director served during 2021, in each case held during the period for which each respective director was serving as a director.

#### ANNUAL MEETING ATTENDANCE

Each director is expected to attend our annual meetings of stockholders pursuant to our Corporate Governance Guidelines. All of our directors during 2021, other than Ms. Bozilenko and Mr. Edwards, attended the 2021 annual meeting of stockholders.

#### Information Regarding Committees of the Board of Directors

The Board has three standing committees - an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee - and a Finance and Strategic Transactions Committee, or the FAST Committee. The following table provides membership and meeting information for 2021 for each of the committees of the Board:

			Nominating and Corporate	
Name	Audit	Compensation	Governance	FAST
Adrian Adams	-	X	X	Chair
Richard Afable, M.D.	-	Chair	-	-
Marina Bozilenko	X(1)	-	-	X(1)
Jill Broadfoot	X(2)	-	-	-
Mark G. Edwards	Chair(3)	-	-	X(4)
Stephen J. Hoffman, M.D., Ph.D.	X(5)	-	X	-
Howard B. Rosen	X	-	-	-
Mark Wan	-	X	Chair	X
Meetings in 2021 (#)	4	4	6	11
Actions by Written Consent in 2021 (#)	2	5	3	1

- (1) Ms. Bozilenko replaced Mr. Edwards on the committee upon her appointment to the committee on March 30, 2021.
- (2) Ms. Broadfoot was appointed to the committee effective November 20, 2021. Ms. Broadfoot was appointed as Chair of the committee effective April 1, 2022.
- (3) Mr. Edwards served as Chair of the committee until his resignation effective March 31, 2022.
- (4) Mr. Edwards served on the committee until Ms. Bozilenko's appointment to the committee on March 30, 2021.
- (5) Dr. Hoffman resigned from the committee effective April 30, 2022.

Below is a description of each of the committees of the Board.

#### Audit Committee

The Audit Committee was established by the Board in accordance with Section 3(a)(58)(A) of the Exchange Act to oversee our 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 to perform any proposed permissible non-audit services;
- monitors the rotation of partners of the independent auditors on our audit engagement team as required by law;
- reviews and approves or rejects transactions between AcelRx 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 us 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 our annual audited financial statements and quarterly financial statements with management and the independent auditor, including a review of our disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

In 2021, the Audit Committee was comprised of Messrs. Edwards and Rosen, Ms. Broadfoot and Dr. Hoffman, each of whom was a non-employee member of our Board. Mr. Edwards resigned from our Board effective March 31, 2022 and Ms. Broadfoot became Chair of the Audit Committee, effective April 1, 2022. Dr. Hoffman resigned from the Audit Committee effective April 30, 2022 and Ms. Bozilenko was appointed as a member of the Audit Committee effective immediately upon Dr. Hoffman's resignation. The Audit Committee has adopted a written charter that is available on our website at <a href="https://www.acelrx.com">www.acelrx.com</a>.

The Board reviews the Nasdaq listing standards definition of independence for Audit Committee members on an annual basis and has determined that all members of the 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 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 each of Mr. Edwards and Mses. Broadfoot and Bozilenko 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 each of Mr. Edwards and Mses. Broadfoot and Bozilenko with accounting matters, in analyzing and evaluating financial statements and in managing private equity investments. Mr. Edwards served as Chair of the Audit Committee until March 31, 2022 and Ms. Broadfoot became Chair of the Audit Committee, effective April 1, 2022. 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 Dr. Afable serving as the Chairman of the Compensation Committee. All members of the Compensation Committee are independent (as independence is currently defined in Rules 5605(a)(2) and 5605(d)(2) of Nasdaq listing standards). The Compensation Committee has adopted a written charter that is available on our website at <a href="https://www.acelrx.com">www.acelrx.com</a>.

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

- approving or recommending for approval to our Board the compensation and other terms of employment of our executive officers, including our Chief Executive Officer;
- approving or recommending to our Board performance goals and objectives relevant to the compensation of our executive officers, including our Chief Executive Officer, 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 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 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 the terms of any employment agreements, severance arrangements, change of control protections and any other compensatory arrangements for our executive officers;
- 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 is responsible for identifying, reviewing and evaluating candidates to serve as directors of AcelRx (consistent with criteria approved by the Board), reviewing and evaluating incumbent directors, recommending to the Board for selection candidates for election to the Board, 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 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 has adopted a written charter that is available on our website at <a href="https://www.acelrx.com">www.acelrx.com</a>.

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 AcelRx, 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 our 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, with a focus on current and upcoming Board diversity requirements, the operating requirements of AcelRx 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 AcelRx, 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 AcelRx during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. In the case of new director candidates, the Nominating and Corporate Governance Committee also determines whether the nominee is independent for Nasdaq purposes, which determination is based upon applicable Nasdaq listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Corporate Governance Committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. The Nominating and Corporate Governance Committee meets to discuss and consider the candidates' qualifications and then selects a nominee for recommendation to the Board by majority vote.

The Nominating and Corporate Governance Committee, to date, has not adopted a formal policy with regard to the consideration of director candidates recommended by stockholders and will consider 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 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. The Nominating and Corporate Governance Committee believes that it is in the best position to identify, review, evaluate and select qualified candidates for Board membership, based on the comprehensive criteria for Board membership approved by the Board. 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: 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545, at least 120 days prior to the anniversary date of the mailing of our 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 AcelRx 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.

#### Finance and Strategic Transactions Committee

The FAST Committee is responsible for matters delegated to it by the Board from time to time, which include reviewing capital market and financing transactions, M&A opportunities, and other business development and strategic transaction opportunities for us. The FAST Committee is comprised of three directors: Messrs. Adams and Wan and Ms. Bozilenko. Mr. Edwards served on the FAST Committee prior to Ms. Bozilenko's appointment. Mr. Adams serves as Chairman of the FAST Committee. Our Board has determined that Messrs. Adams and Wan and Ms. Bozilenko are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards).

#### COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Compensation Committee consists of directors Dr. Afable, and Messrs. Wan and Adams. Dr. Afable serves as Chair of the Compensation Committee. None of the members of our Compensation Committee during 2021 is currently or has been, at any time since our formation, one of our officers or employees. During 2021, no executive officer served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our Board or our Compensation Committee. None of the members of our Compensation Committee during 2021 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

Although we do not have a formal policy regarding communications with the Board, any stockholder who wishes to address questions regarding our business or affairs directly with the Board, or any individual director, should direct his or her questions in writing to the Chairman of the Board, c/o AcelRx Pharmaceuticals, Inc., 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545. At the request of the directors, the Secretary to the Board reviews all correspondence addressed to the Chairman or to individual directors, organizes the correspondence, and provides it to the Chairman or to individual directors, as appropriate. Our directors have requested that certain items that are unrelated to the Board's duties, such as spam, junk mail, mass mailings, solicitations, resumes, and job inquiries, not be provided to directors and be discarded, as appropriate.

#### CODE OF BUSINESS CONDUCT AND ETHICS

We have 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, 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545. 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.

#### ANTI-HEDGING POLICY

Our insider trading policy prohibits the trading of derivatives or pledges or hedging of our equity securities by members of our board of directors, executive officers and employees.

#### DIRECTOR COMPENSATION

#### Non-Employee Director Compensation

Compensation for our non-employee directors consists of cash, restricted stock unit awards, or RSUs and stock options. The Compensation Committee periodically reviews the compensation paid to non-employee directors for their service on the Board and its committees and recommends any changes considered appropriate to the full Board for its approval.

Cash Compensation Arrangements for 2021

Our non-employee director cash compensation is aligned with the 50th percentile of our peer group. On March 30, 2021, the Board revised the Non-Employee Director Compensation policy such that, effective April 1, 2021, the FAST Committee Chair receives an additional annual retainer of \$20,000 and a FAST Committee member receives an additional annual retainer of \$10,000.

Each member of our Board 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 \$30,000;
- the Audit Committee Chair receives an additional annual retainer of \$20,000;
- the FAST Committee Chair receives an additional annual retainer of \$20,000 (effective April 1, 2021);
- the Compensation Committee Chair receives an additional annual retainer of \$15,000;
- the Nominating and Corporate Governance Committee Chair receives an additional annual retainer of \$10,000;
- an Audit Committee member receives an additional annual retainer of \$10,000;
- a FAST Committee member receives an additional annual retainer of \$10,000 (effective April 1, 2021);
- a Compensation Committee member receives an additional annual retainer of \$7,500; and
- a Nominating and Corporate Governance Committee member receives an additional retainer of \$5,000.

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

#### Equity Compensation Arrangements for 2021

Equity compensation for our non-employee directors consists of a mix of stock options and RSUs. The equity grant value is split approximately equally between stock options and RSUs, with the number of RSUs being equal to 50% of the number of stock options. In February 2021, the Board approved the recommendations of the Compensation Committee to align our non-employee director equity compensation closer to the 50th percentile of our peer group. Beginning in February 2021, upon election or appointment to our Board, a new non-employee director will be granted an initial stock option to purchase 30,000 shares of our common stock, which will vest as to  $1/3^{rd}$  of the shares subject to the option on the one-year anniversary of the date of grant and as to the remaining shares subject to the option on an equal monthly basis over the following two-year period, and 15,000 RSUs, which will vest as to  $1/3^{rd}$  of the RSUs on each anniversary of the date of grant over a three-year period. Each non-employee director who is then serving as a director or who is elected to our Board on the date of an annual meeting will be granted a stock option to purchase 20,000 shares of our common stock, which will vest in full on the one-year anniversary of the date of grant.

Each of the stock options will be granted with an exercise price equal to the fair market value of our common stock on the date of grant. All stock options and RSUs awarded to our non-employee directors are entitled to full vesting acceleration as of immediately prior to the effective date of certain change of 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 AcelRx.

#### 2021 Director Compensation

The following table sets forth certain summary information for the year ended December 31, 2021 with respect to the compensation of our non-employee directors. Neither Mr. Angotti nor Dr. Palmer, who are executive officers, received or receives any additional compensation for serving on our Board. Ms. Bozilenko and Ms. Broadfoot were appointed to the Board on March 30, 2021 and November 20, 2021, respectively. Mr. Edwards resigned from the Board effective March 31, 2022.

Name	Fees Earned or Paid in Cash	Stock Awards (1)(3)	Option Awards (2)(3)	Total
Adrian Adams	\$97,500	\$14,100	\$21,058	\$132,658
Richard Afable, M.D.	55,000	14,100	21,058	90,158
Marina Bozilenko	37,500	38,250	56,715	132,465
Jill Broadfoot	4,166	10,800	15,961	30,927
Mark G. Edwards	60,000	14,100	21,058	95,158
Stephen J. Hoffman, M.D., Ph.D.	55,000	14,100	21,058	90,158
Howard B. Rosen	50,000	14,100	21,058	85,158
Mark Wan	65,000	14,100	21,058	100,158

- (1) The dollar amount in this column represents the grant date fair value of the RSUs granted to our non-employee directors during 2021, as computed in accordance with ASC Topic 718, not including any estimates of forfeitures. For a discussion of valuation assumptions, see Note 1 to our consolidated financial statements and the discussion under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Estimates—Stock-Based Compensation" included in our Annual Report on Form 10-K filed with the SEC on March 10, 2022. This amount does not correspond to the actual economic value that may be received from the RSUs. As of December 31, 2021, our non-employee directors had the following outstanding RSUs: Mr. Adams 10,000; Dr. Afable 10,000; Ms. Bozilenko 25,000; Ms. Broadfoot 15,000; Mr. Edwards 10,000; Dr. Hoffman 10,000; Mr. Rosen 10,000; and Mr. Wan 10,000.
- The dollar amount in this column represents the grant date fair value of the stock options granted to our non-employee directors during 2021. 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 Notes 1 and 14 to our consolidated financial statements included in our Annual Report on Form 10-K filed with the SEC on March 10, 2022. This amount does not necessarily correspond to the actual economic value that may be recognized from the options. As of December 31, 2021, our non-employee directors had the following number of outstanding options: Mr. Adams 147,500; Dr. Afable 132,500; Ms. Bozilenko 50,000; Ms. Broadfoot 30,000; Mr. Edwards 135,625; Dr. Hoffman 145,000; Mr. Rosen 1,521,000; and Mr. Wan 145,000.
- On June 17, 2021, the date of our 2021 annual meeting of stockholders, each of the non-employee directors was granted 10,000 RSUs and an option to purchase 20,000 shares of our common stock with an exercise price of \$1.41 per share. The shares subject to these stock options and RSUs vest on the first anniversary of the date of grant.

#### Non-Employee Director Compensation Changes for 2022

In February 2022, the Board approved the recommendations of the Compensation Committee to better align our non-employee director equity compensation closer to the 50th percentile of our peer group. Beginning in February 2022, upon election or appointment to our Board, a new non-employee director will be granted an initial stock option to purchase 46,500 shares of our common stock, which will vest as to 1/3rd of the shares subject to the option on the one-year anniversary of the date of grant and as to the remaining shares subject to the option on an equal monthly basis over the following two-year period, and 23,250 RSUs, which will vest as to 1/3rd of the RSUs on each anniversary of the date of grant over a three-year period. Each non-employee director who is then serving as a director or who is elected to our Board on the date of an annual meeting will be granted a stock option to purchase 31,000 shares of our common stock, which will vest in full on the one-year anniversary of the date of grant, and 15,500 RSUs, which will vest in full on the one-year anniversary of the date of grant.

#### 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 AcelRx 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 year ended December 31, 2021 with management of AcelRx. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed pursuant to Public Company Accounting Oversight Board Auditing Standard No. 1301, Communications with Audit Committees. 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 recommended to the Board that the audited financial statements be included in AcelRx's Annual Report on Form 10-K for the year ended December 31, 2021.

Members of the Audit Committee

Mark G. Edwards, Committee Chair though March 31, 2022 Jill Broadfoot, Committee Chair, effective April 1, 2022 Marina Bozilenko Howard B. Rosen

#### EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth certain information concerning our executive officers as of May 16, 2022:

<u>Name</u>	<u>Age</u>	Position
Vincent J. Angotti	54	Director, Chief Executive Officer
Raffi Asadorian	52	Chief Financial Officer
Pamela P. Palmer, M.D., Ph.D.	59	Director, Chief Medical Officer and Co-Founder
Badri Dasu	59	Chief Engineering Officer

Vincent J. Angotti. Mr. Angotti's biography is included above under the section titled "Proposal 1—Election of Directors— Class II Nominees for Election for a Three-Year Term Expiring at the 2025 Annual Meeting."

Raffi Asadorian has served as our Chief Financial Officer since August 2017. Previously, Mr. Asadorian served as the Chief Financial Officer of Amyris, Inc., a publicly traded commercial-stage biotechnology company, from January 2015 to January 2017. Prior to Amyris, he served as the Chief Financial Officer of Unilabs, a private equity-owned medical diagnostics company, from August 2009 to October 2014. Mr. Asadorian started his career at PricewaterhouseCoopers (PwC) where he was a partner in its Transaction Services (M&A advisory) group. While at PwC, Mr. Asadorian advised Barr Pharmaceuticals, a publicly traded specialty pharmaceutical company, on its acquisition of PLIVA, a publicly traded pharmaceutical company, and, after its acquisition, Mr. Asadorian joined Barr as Senior Vice President and Chief Financial Officer of its PLIVA business from 2007 to 2009. In that role, Mr. Asadorian oversaw a global finance team and was responsible for Barr's ex-US financial operations, until its acquisition by Teva Pharmaceuticals.

**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 Nominees for Election for a Three-Year Term Expiring at the 2025 Annual Meeting."

*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.

#### **EXECUTIVE COMPENSATION**

Our "named executive officers" for the year ended December 31, 2021, consisting of our chief executive officer and the two other most highly compensated executive officers serving as of December 31, 2021, were:

- Vincent J. Angotti, Chief Executive Officer
- Raffi Asadorian, Chief Financial Officer
- Pamela P. Palmer, M.D., Ph.D., Chief Medical Officer and Co-Founder

#### **Summary Compensation Table**

The following table sets forth certain summary information for the year indicated with respect to our named executive officers as of December 31, 2021.

									Non-Equity			
Name and Principal					Stock		Option	Iı	ncentive Plan	A	All Other	
Position	Year	S	Salary	Av	wards(1)	I	Awards(2)	Co	mpensation(3)	Com	pensation(4)	Total
Vincent J. Angotti	2021	\$	636,540	\$	376,000	\$	1,156,667	\$	267,347	\$	11,400	\$ 2,447,954
Chief Executive Officer	2020		636,540		344,000		489,049		284,533		11,400	1,765,522
Raffi Asadorian	2021		460,616		129,250		272,262		151,082		11,400	1,024,610
Chief Financial Officer	2020		442,900		118,250		168,111		150,055		11,400	890,716
Pamela P. Palmer, M.D.,												
Ph.D.	2021		511,124		129,250		272,262		159,471		11,400	1,083,507
Chief Medical Officer	2020		496,236		118,250		168,111		168,125		11,400	962,122

- (1) The dollar amounts in this column represent the aggregate grant date fair value of the RSUs granted during the year, as computed in accordance with ASC 718, not including any estimates of forfeitures. For a discussion of valuation assumptions, see Notes 1 and 14 to our consolidated financial statements included in our Annual Report on Form 10-K filed with the SEC on March 10, 2022. These amounts do not necessarily correspond to the actual economic value that may be received by the named executive officers.
- (2) 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 Notes 1 and 14 to our consolidated financial statements included in our Annual Report on Form 10-K filed with the SEC on March 10, 2022. These amounts do not necessarily correspond to the actual value that may be recognized from the option awards by the named executive officers.
- (3) The dollar amounts in 2021 reflect the incentive bonuses awarded to the named executive officers under our 2021 Cash Bonus Plan and which were paid in the first quarter of 2022.
- (4) Reflects matching contributions made by AcelRx under its 401(k) Plan on behalf of each named executive officer.

#### **Employment Arrangements**

#### Vincent J. Angotti

In February 2017, we entered into an offer letter agreement with Mr. Angotti, which provided for an initial annual base salary of \$600,000 with an annual cash bonus targeted at 55% of Mr. Angotti's base salary. As of the date of this proxy statement, Mr. Angotti's annual base salary is \$636,540 and Mr. Angotti is eligible for an annual target bonus of up to 60% of his annual base salary.

#### Raffi Asadorian

In July 2017, we entered into an offer letter agreement with Mr. Asadorian, which provided for an initial annual base salary of \$400,000 with an annual cash bonus targeted at 30% of Mr. Asadorian's base salary. As of the date of this proxy statement, Mr. Asadorian's annual base salary is \$474,435 and Mr. Asadorian is eligible for an annual target bonus of up to 40% of his annual base salary.

#### Pamela P. Palmer, M.D., Ph.D.

In December 2010, we entered into an offer letter agreement with Dr. Palmer, which provided for an initial annual base salary of \$375,000. As of the date of this proxy statement, Dr. Palmer's annual base salary is \$526,458 and Dr. Palmer is eligible for an annual target bonus of up to 40% of her annual base salary.

#### Outstanding Equity Awards at December 31, 2021

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2021.

			Option A		Stock Awards(2)			
Name	Vesting Commencement Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested	
Vincent J. Angotti	3/3/2021					200,000	\$ 112,040	
	3/3/2021 2/6/2020 2/6/2020	183,333	1,000,000 216,667	\$ 1.88 1.72	3/3/2031 2/6/2030	133,340	74,698	
	2/11/2019	•				66,680	37,354	
	2/11/2019	283,333	116,667	2.51	2/11/2029			
	1/22/2018	342,708 800,000	7,292	2.00 3.30	1/22/2028 3/6/2027			
		192,500		2.23	4/9/2028			
		172,300		2.23	4/ // 2020			
Raffi Asadorian	3/3/2021					68,750	38,514	
	3/3/2021		137,500	1.88	3/3/2031	, in the second	•	
	3/3/2021		68,750	1.88	3/3/2031			
	2/6/2020					45,836	25,677	
	2/6/2020	63,020	74,480	1.72	2/6/2030			
	2/11/2019	07.205	40.105	2.51	0/11/0000	22,922	12,841	
	2/11/2019	97,395	40,105	2.51	2/11/2029			
	1/22/2018	144,427 220,000	3,073	2.00 3.00	1/22/2028 8/16/2027			
		81,125		2.23	4/9/2028			
		01,123		2.23	4/ // 2020			
Pamela P. Palmer,	2/2/2021					68,750	38,514	
M.D., Ph.D.	3/3/2021 3/3/2021		137,500	1.88	3/3/2031	08,730	36,314	
	3/3/2021		68,750	1.88	3/3/2031			
	2/6/2020		00,750	1.00	3/3/2031	45,836	25,677	
	2/6/2020	63,020	74,480	1.72	2/6/2030	-,	- <b>,</b> - · ·	
	2/11/2019					22,922	12,841	
	2/11/2019	97,395	40,105	2.51	2/11/2029			
	1/22/2018	169,395	3,605	2.00	1/22/2028			
		132,500		3.00	2/7/2027			
		110,500		3.40	2/10/2026			
		95,150		2.23	4/9/2028			
		110,000 100,000		6.60 10.34	12/2/2024 2/4/2024			
		388,137		5.31	2/5/2023			
		231,911		3.39	2/7/2022			
		201,711		5.57	2, ,,2022			

- With the exception of the performance-based stock options granted on April 9, 2018, and the share price performance-based vesting options granted on March 3, 2021, all stock options vest over 4 years, with 25% of the shares vesting on the one year anniversary of the vesting commencement date, and 1/48th of the shares vesting monthly thereafter, subject to continuous service. Vesting commencement dates are included for stock options that were not fully vested as of December 31, 2021. The performance-based stock options granted to our named executive officers on April 9, 2018 were exercisable as follows: 50% of the stock option award became vested and exercisable upon our achievement of commercial approval by the FDA of its NDA for DSUVIA on or before February 15, 2019, which FDA approval was received on November 2, 2018; and the remaining 50% of the award vested on the one-year anniversary of the date of such FDA approval, or November 2, 2019, subject to continuous service.
- (2) The RSUs granted to our named executive officers vest in three equal consecutive annual installments on the first three anniversaries of the vesting commencement date.

#### **Benefits Upon Termination or Change in Control**

#### Vincent J. Angotti

Under our offer letter agreement with Mr. Angotti, in the event that Mr. Angotti's employment is terminated by us without cause (and not due to his death or disability) or he resigns for good reason, referred to as an involuntary termination, then he will be entitled to the following severance benefits:

- a lump sum cash severance payment in an amount equal to twelve months of his then-current base salary, plus 100% of his target annual bonus for the year of termination;
- reimbursement of COBRA premiums for up to twelve months; and
- twelve months' worth of accelerated vesting of his equity awards, and (iv) extended exercisability of vested options for up to twelve months following his termination date. In addition, if Mr. Angotti experiences an involuntary termination within three months prior to or eighteen months following a change in control of AcelRx, then his severance benefits will be increased as follows: (w) the lump sum cash severance payment will instead be an amount equal to twenty-four months of his then-current base salary, plus 200% of his target annual bonus; (x) he will be entitled to payment of any bonus earned but not yet paid for the prior year; (y) the COBRA premium reimbursement period will be for up to twenty-four months; and (z) 100% of all then-unvested equity awards will accelerate as of his termination date. In order to receive any severance benefits, Mr. Angotti must sign a waiver and release of claims in favor of AcelRx.

Severance Benefit Plan. In February 2017, our Board adopted an Amended and Restated Severance Benefit Plan, or the Severance Plan, to create two tiers of severance benefits payable to participating executive officers upon an involuntary termination in connection with a change in control, depending on the executive officer's position with AcelRx as of the change in control transaction. The Severance Plan is subject to the Employee Retirement Income Security Act of 1974 and is and intended to maintain the competitiveness and effectiveness of our total compensation packages. The Severance Plan replaces the prior change of control and severance arrangements contained in the offer letter agreements with Dr. Palmer.

The Severance Plan provides that if an executive officer's employment with us is terminated by us without cause (and not due to death or disability) or the executive officer resigns for good reason (as such terms are defined in the Severance Plan), referred to below as an involuntary termination, the executive officer will receive (i) a lump sum severance payment equal to 6 months of the monthly base salary the executive officer was receiving immediately prior to such termination date; and (ii) up to 6 months of reimbursement for premiums paid for COBRA coverage for the executive officer and his or her eligible dependents. In addition, the Severance Plan provides for the following enhanced severance benefits if an executive officer's involuntary termination occurs within 3 months prior to or within 18 months after a change in control (as such term is defined in the Severance Plan) of AcelRy:

Severance Benefit	C-level officers *	VP, SVP or EVP		
Base Salary:	12 months	6 months		
Target Bonus:	100% of target bonus opportunity	Greater of 50% of target bonus opportunity, or a prorated amount of target bonus opportunity through termination date		
Reimbursement of COBRA Premiums:	A Up to 12 months	Up to 6 months		
Vesting Acceleration:	ing Acceleration: 100% vesting and exercisability of all outstanding unvested equity awards subject to time-based vesting			
Extended exercisability of stock options:	Until 6 months after termination date (cearlier expiration date of the award)	or Same as for C-level executive officers		

<sup>\*</sup> Executive officer must elect to participate in the Severance Plan in lieu of any separate benefits in their employment offer letters

The Severance Plan also provides that in the event that an outstanding unvested time-based vesting equity award does not become an assumed award in connection with a change in control, each such outstanding equity award will become 100% vested and exercisable immediately prior to the effective date of the change in control. All severance benefits payable under the Severance Plan are subject to the execution of a waiver and release of claims in favor of AcelRx.

Mr. Angotti's offer letter and the Severance Plan also contain a "better after-tax" provision, which provides that if any of the payments to the executive constitutes a parachute payment under Section 280G of the Code, the payments will either be (i) reduced or (ii) provided in full to the executive, whichever results in the executive receiving the greater amount after taking into consideration the payment of all taxes, including the excise tax under Section 4999 of the Code, in each case based upon the highest marginal rate for the applicable tax.

#### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of our common stock as of May 16, 2022 by:

- all those known by us to be beneficial owners of more than 5% of our common stock;
- each director and nominee for director;
- each named executive officer; and
- all of our current executive officers and directors as a group.

	Beneficial Ownership(1)			
	Number of			
Name of Beneficial Owner	Shares	% of Total		
Stockholders Owning Greater than 5%:				
Armistice Capital, LLC(2)	12,314,479	8.4%		
Directors and Named Executive Officers:				
Adrian Adams(3)	343,750	*		
Richard Afable, M.D. (4)	154,750	*		
Vincent J. Angotti(5)	2,306,331	1.5%		
Marina Bozilenko(6)	47,498	*		
Jill Broadfoot	<del>-</del>	_		
Stephen J. Hoffman, M.D., Ph.D.(7)	166,250	*		
Pamela P. Palmer, M.D., Ph.D.(8)	1,943,642	1.3%		
Howard B. Rosen(9)	1,599,750	1.1%		
Mark Wan(10)	166,250	*		
Raffi Asadorian(11)	872,924	*		
All current executive officers and directors as a group (11 persons)(12)	8,522,466	5.5%		

- \* 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 147,114,006 shares outstanding on May 16, 2022, 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 that are exercisable within 60 days of May 16, 2022. Shares issuable pursuant to the exercise of stock options that are exercisable stock units vesting within 60 days of May 16, 2022, are deemed to be outstanding 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.
- Based on information disclosed in a Schedule 13G filed with the SEC on February 15, 2022, by Armistice Capital, LLC ("Armistice Capital") reporting ownership as of December 31, 2021. Includes 12,314,479 shares reported as beneficially owned by Armistice Capital, of which Armistice Capital reports sole voting power and sole dispositive power with respect to zero shares, and shared voting power and shared dispositive power with respect to 12,314,479 shares, and 12,314,479 shares reported as beneficially owned by Steven Boyd ("Mr. Boyd"), of which Mr. Boyd reports sole voting power and sole dispositive power with respect to zero shares, and shared voting power and shared dispositive power with respect to 12,314,479 shares. Armistice Capital is the investment manager of Armistice Capital Master Fund Ltd. (the "Master Fund"), the direct holder of the reported shares, and pursuant to an Investment Management Agreement, Armistice Capital exercises voting and investment power over these shares held by the Master Fund and thus may be deemed to beneficially own these shares held by the Master Fund. Mr. Boyd, as the managing member of Armistice Capital, may be deemed to beneficially own these shares held by the Master Fund specifically disclaims beneficial ownership of these shares directly held by it by virtue of its inability to vote or dispose of such securities as a result of its Investment Management Agreement with Armistice Capital. Despite such shared beneficial ownership, the reporting persons disclaim that they constitute a statutory group within the meaning of Rule 13d-5(b)(1) of the Securities Exchange Act of 1934. The address for Armistice Capital and Mr. Boyd is 510 Madison Avenue, 7th Floor, New York, New York 10022.

- (3) Includes 147,500 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (4) Includes 132,500 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (5) Includes 1,925,832 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (6) Includes 32,499 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (7) Includes 145,000 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (8) Includes 1,355,639 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (9) Includes 1,521,000 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (10) Includes 145,000 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (11) Includes 694,977 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.
- (12) Includes 6,868,178 shares issuable pursuant to stock options exercisable within 60 days of May 16, 2022.

#### **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, 2021.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights(1)  (A)		Veighted-average exercise ice of outstanding options, warrants and rights <sup>(2)</sup> (B)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column A)(3)  (C)
Equity compensation plans approved by		¢.	2.99	
security holders	16,058,426	Э	2.99	12,315,297
Equity compensation plans not approved				
by security holders			_	
Total	16,058,426	\$	2.99	12,315,297

- Consists of the: (i) 2011 Equity Incentive Plan, as amended, (ii) Amended and Restated 2020 Equity Incentive Plan, and (iii) Amended and Restated 2011 Employee Stock Purchase Plan, or the ESPP. Number of securities includes: (i) 14,284,050 options with a weighted-average remaining life of 5.8 years and (ii) 1,774,376 shares of common stock to be issued following the vesting of RSUs for which no exercise price will be paid. Under the ESPP, participants are permitted to purchase our common stock at a discount on certain dates through payroll deductions within a pre-determined purchase period. Accordingly, the number of shares to be issued upon exercise of outstanding rights under the ESPP as of December 31, 2021 is not determinable.
- (2) The calculation of weighted average exercise price includes only outstanding stock options.
- (3) As of December 31, 2021, (i) 7,858,933 shares of common stock were available for issuance under the 2020 Equity Incentive Plan and (ii) 4,456,364 shares of common stock were available for issuance under the ESPP. On February 28, 2022, 153,435 shares were purchased under the ESPP and as of May 16, 2022, up to a maximum of 180,000 shares may be purchased in the current purchase period.

#### RELATED PERSON TRANSACTIONS

#### Policy and Procedures for Review of Related Party Transactions

Our Audit Committee charter provides that the Audit Committee will review and oversee 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 AcelRx and our related persons. The policy is designed to prevent transactions between us and any of our related persons that may interfere with the performance of our employees' and directors' duties to AcelRx or deprive us of a business opportunity. Any such transactions with related persons may present actual or potential conflicts of interests. However, we recognize that whether or not a conflict exists is often unclear and, in many circumstances, transactions with related persons may, on balance, be beneficial to us and our stockholders.

#### **Certain Relationships and Related Transactions**

There has not been since January 1, 2020, nor is there currently proposed, any transaction or series of similar transactions to which we were or are 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 titled "Executive Compensation" and "Director Compensation," and 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 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.

#### STOCKHOLDER PROPOSALS FOR 2023 ANNUAL MEETING

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing by February 3, 2023 to AcelRx's Secretary at 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545. 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 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545 between March 17, 2023 and April 16, 2023, unless the date of our 2023 annual meeting of stockholders is before June 15, 2023 or after August 14, 2023, in which case such proposals shall be submitted no earlier than 120 days prior to the 2023 annual meeting of stockholders and no later than the later of (i) 90 days before the 2023 annual meeting of stockholders or (ii) ten days after notice of the date of the 2023 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 stockholders 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 stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are AcelRx stockholders will be "householding" our 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 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545, or call our principal office at (650) 216-3500. 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 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

Adrian Adams Chairman

June , 2022

A copy of AcelRx Pharmaceutical's Annual Report to the Securities and Exchange Commission on Form 10-K for the year ended December 31, 2021 is available without charge upon written request to: Corporate Secretary, AcelRx Pharmaceuticals, Inc. at 25821 Industrial Boulevard, Suite 400, Hayward, CA 94545.

#### CERTIFICATE OF AMENDMENT OF AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ACELRX PHARMACEUTICALS, INC.

AcelRx Pharmaceuticals, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies that:

FIRST: The name of this corporation is AcelRx Pharmaceuticals, Inc.

**SECOND:** The date on which the Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware was July 13, 2005, under the name "SuRx, Inc."

**THIRD:** The Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions amending the Amended and Restated Certificate of Incorporation of the Corporation, and any amendments thereto, to increase the number of authorized shares of Common Stock to 300,000,000. Specifically, Section A of Article IV is hereby amended and restated in its entirety as follows:

"A. This corporation is authorized to issue two classes of stock to be designated, respectively, "*Common Stock*" and "*Preferred Stock*." The total number of shares which this corporation is authorized to issue is 310,000,000 shares. 300,000,000 shares shall be Common Stock, each having a par value of \$0.001. 10,000,000 shares shall be Preferred Stock, each having a par value of \$0.001."

**FOURTH:** This Certificate of Amendment was duly adopted by the stockholders of the Corporation in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware.

[Signature Page Follows]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President and Chief Executive Officer this day of , 2022.

A-1

By:	
	VINCENT J. ANGOTTI
	President and Chief Executive Officer

ACELRX PHARMACEUTICALS, INC.



ACELEX PHARMACEUTICALS, INC. 25821 INDUSTRIAL BOULEVARD, SUITE 400 HAVMMAD CA 94545

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

Signature [PLEASE SIGN WITHIN BOX]



VOTE BY INTERNET Sefore The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11.59 p.m. Eastern Time on July 14, 2022. 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.

During The Meeting - Go to www.virtualshareholdermeeting.com/ACRX2022

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

#### 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 instituctions 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. Vote by 11:59 p.m. Eastern Time on July 14, 2022. 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, do Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

D82426-P71665 KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED. ACELRX PHARMACEUTICALS, INC. 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. For Withhold For All The Board of Directors recommends you vote FOR the 0 0 0 1. Election of Directors Nominees: 01) Vincent J. Angotti 02) Stephen J. Hoffman, M.D., Ph.D. 03) Pamela P. Palmer, M.D., Ph.D. The Board of Directors recommends you vote FOR the following proposals: For Against Abstain To ratify the appointment of WithumSmith+Brown, PC as our independent registered public accounting firm for the year ending December 31, 2022. 0 0 0 0 0 0 To approve, on an advisory basis, the compensation of our named executive officers. To approve an amendment to our Amended and Restated Certificate of Incorporation to increase the number of authorized shares of common stock from 200 million to 300 million shares. 0 0 0 NOTE: Such other business as may properly come before the meeting or any adjournment thereof. Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature (Joint Owners)

# Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Notice and Proxy Statement and Form 10-K are available at www.proxyvote.com.

D82427-P71665

# ACELRX PHARMACEUTICALS, INC. Annual Meeting of Stockholders July 15, 2022 10:00 AM PDT This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Vincent J. Angotti and Raffi Asadorian, or either of them, as proxies each with the power to appoint his substitute, and hereby authorize(s) 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 Stockholders to be held at 10:00 AM, PDT on July 15, 2022, via the virtual meeting at www.virtualshareholdermeeting.com/ACRX2022, 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