

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

SCHEDULE 14A
(Rule 14a-101)
INFORMATION REQUIRED IN PROXY STATEMENT
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 under §240.14a-12

Lyra Therapeutics, Inc.
(Name of Registrant as Specified in its Charter)

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

Payment of Filing Fee (Check all boxes that apply):

- No fee required
 - Fee paid previously with preliminary materials
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11
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Lyra Therapeutics, Inc.

NOTICE & PROXY STATEMENT

Annual Meeting of Stockholders

June 13, 2024

8:00 a.m. (Eastern time)

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LYRA THERAPEUTICS, INC.
480 ARSENAL WAY
WATERTOWN, MASSACHUSETTS 02472

April [●], 2024

To Our Stockholders:

You are cordially invited to attend the 2024 Annual Meeting of Stockholders (the “Annual Meeting”) of Lyra Therapeutics, Inc. at 8:00 a.m. Eastern time, on Thursday, June 13, 2024. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast.

The Notice of Meeting and Proxy Statement on the following pages describe the matters to be presented at the Annual Meeting. Please see the section called “Who can attend the Annual Meeting?” on page [●] of the proxy statement for more information about how to attend the meeting online.

Whether or not you attend the Annual Meeting online, it is important that your shares be represented and voted at the Annual Meeting. Therefore, I urge you to promptly vote and submit your proxy by phone, via the Internet, or, if you received paper copies of these materials, by signing, dating and returning the enclosed proxy card in the enclosed envelope, which requires no postage if mailed in the United States. If you have previously received our Notice of Internet Availability of Proxy Materials, then instructions regarding how you can vote are contained in that notice. If you have received a proxy card, then instructions regarding how you can vote are contained on the proxy card. If you decide to attend the Annual Meeting, you will be able to vote online, even if you have previously submitted your proxy.

Thank you for your support.

Sincerely,

[●]

Maria Palasis, Ph.D.
President and Chief Executive Officer and Director

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LYRA THERAPEUTICS, INC.
480 Arsenal Way
Watertown, Massachusetts 02472

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD THURSDAY, JUNE 13, 2024**

The Annual Meeting of Stockholders (the “Annual Meeting”) of Lyra Therapeutics, Inc., a Delaware corporation (the “Company”), will be held at 8:00 a.m. Eastern time on Thursday, June 13, 2024. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast.

You will be able to attend the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/LYRA2024 and entering your 16-digit control number included in your Notice of Internet Availability of Proxy Materials, on your proxy card or on the instructions that accompanied your proxy materials. The Annual Meeting will be held for the following purposes:

- To elect Konstantin Poukalov and Nancy L. Snyderman, M.D., FACS as Class I Directors to serve until the Company’s 2027 Annual Meeting of Stockholders, and until their respective successors shall have been duly elected and qualified;
- To ratify the appointment of BDO USA, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2024;
- To approve an amendment to our Restated Certificate of Incorporation to provide for the exculpation of officers from breaches of fiduciary duty to the fullest extent permitted by the General Corporation Law of the State of Delaware (“DGCL”); and
- To transact such other business as may properly come before the Annual Meeting or any continuation, postponement, or adjournment of the Annual Meeting.

Holders of record of our common stock as of the close of business on April 16, 2024 are entitled to notice of and to vote at the Annual Meeting, or any continuation, postponement or adjournment of the Annual Meeting. A complete list of such stockholders will be open to the examination of any stockholder for a period of ten days prior to the Annual Meeting for a purpose germane to the meeting by sending an email to Jason Cavalier, Chief Financial Officer and Treasurer, at jcavalier@lyratx.com, stating the purpose of the request and providing proof of ownership of Company stock. The Annual Meeting may be continued or adjourned from time to time without notice other than by announcement at the Annual Meeting.

It is important that your shares be represented regardless of the number of shares you may hold. Whether or not you plan to attend the Annual Meeting online, we urge you to vote your shares via the toll-free telephone number or over the Internet, as described in the enclosed materials. If you receive a copy of the proxy card by mail, you may sign, date and mail the proxy card in the enclosed return envelope. Promptly voting your shares will ensure the presence of a quorum at the Annual Meeting and will save us the expense of further solicitation. Submitting your proxy now will not prevent you from voting your shares at the Annual Meeting if you desire to do so, as your proxy is revocable at your option.

By Order of the Board of Directors,

[●]

Jason Cavalier
Chief Financial Officer and Treasurer
Watertown, Massachusetts
April [●], 2024



PROXY STATEMENT

This proxy statement is furnished in connection with the solicitation by the Board of Directors of Lyra Therapeutics, Inc. of proxies to be voted at our Annual Meeting of Stockholders to be held on Thursday, June 13, 2024 (the “Annual Meeting”), at 8:00 a.m. Eastern time, and at any continuation, postponement, or adjournment of the Annual Meeting. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast. You will be able to attend the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/LYRA2024 and entering your 16-digit control number included in your Notice of Internet Availability of Proxy Materials, on your proxy card or on the instructions that accompanied your proxy materials.

Holders of record of shares of our common stock, \$0.001 par value per share, as of the close of business on April 16, 2024 (the “Record Date”), will be entitled to notice of and to vote at the Annual Meeting and any continuation, postponement, or adjournment of the Annual Meeting. As of the Record Date, there were 60,964,859 shares of common stock outstanding and entitled to vote at the Annual Meeting. Each share of common stock is entitled to one vote on any matter presented to stockholders at the Annual Meeting.

This proxy statement and the Company’s Annual Report to Stockholders for the year ended December 31, 2023 (the “2023 Annual Report”) will be released on or about April [●], 2024 to our stockholders on the Record Date.

Unless otherwise indicated, in this proxy statement, “Lyra,” “Company,” “we,” “us,” and “our” refer to Lyra Therapeutics, Inc.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON THURSDAY, JUNE 13, 2024

**This Proxy Statement and our 2023 Annual Report to Stockholders are available at
www.proxyvote.com**

Proposals

At the Annual Meeting, our stockholders will be asked:

- To elect Konstantin Poukalov and Nancy L. Snyderman, M.D., FACS as Class I Directors to serve until the Company’s 2027 Annual Meeting of Stockholders, and until their respective successors shall have been duly elected and qualified;
- To ratify the appointment of BDO USA, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2024;
- To approve an amendment to our Restated Certificate of Incorporation to provide for the exculpation of officers from breaches of fiduciary duty to the fullest extent permitted by the General Corporation Law of the State of Delaware (“DGCL”); and
- To transact such other business as may properly come before the Annual Meeting or any continuation, postponement, or adjournment of the Annual Meeting.

Recommendations of the Board

The Board of Directors (the “Board”) recommends that you vote your shares as indicated below. If you return a properly completed proxy card, or vote your shares by telephone or Internet, your shares of common stock will be voted on your behalf as you direct. If not otherwise specified, the shares of common stock represented by the proxies will be voted, and the Board recommends that you vote:

- FOR the election of Konstantin Poukalov and Nancy L. Snyderman, M.D., FACS as Class I Directors;
- FOR the ratification of the appointment of BDO USA, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2024; and
- FOR the approval of an amendment to our Restated Certificate of Incorporation to provide for the exculpation of officers from breaches of fiduciary duty to the fullest extent permitted by the DGCL.

We know of no other business that will be presented at the Annual Meeting. If any other matter properly comes before the stockholders for a vote at the Annual Meeting, the proxy holders named on the Company’s proxy card will vote your shares in accordance with their best judgment.

Information About This Proxy Statement

Why you received this proxy statement. You are viewing or have received these proxy materials because Lyra’s Board of Directors is soliciting your proxy to vote your shares at the Annual Meeting. This proxy statement includes information that we are required to provide to you under the rules of the Securities and Exchange Commission (“SEC”) and that is designed to assist you in voting your shares.

Notice of Internet Availability of Proxy Materials. As permitted by SEC rules, Lyra is making this proxy statement and its 2023 Annual Report available to its stockholders electronically via the Internet. On or about April [●], 2024, we will commence mailing to our stockholders a Notice of Internet Availability of Proxy Materials (the “Internet Notice”) containing instructions on how to access this proxy statement and our 2023 Annual Report and vote online. If you received an Internet Notice by mail, you will not receive a printed copy of the proxy materials in the mail unless you specifically request them. Instead, the Internet Notice instructs you on how to access and review all of the important information contained in the proxy statement and 2023 Annual Report. The Internet Notice also instructs you on how you may submit your proxy over the Internet. If you received an Internet Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting such materials contained on the Internet Notice.

Printed Copies of Our Proxy Materials. If you received printed copies of our proxy materials, then instructions regarding how you can vote are contained on the proxy card included in the materials.

Householding. The SEC’s rules permit us to deliver a single set of proxy materials to one address shared by two or more of our stockholders. This delivery method is referred to as “householding” and can result in significant cost savings. To take advantage of this opportunity, we have delivered only one set of proxy materials to multiple stockholders who share an address, unless we received contrary instructions from the impacted stockholders prior to the mailing date. We agree to deliver promptly, upon written or oral request, a separate copy of the proxy materials, as requested, to any stockholder at the shared address to which a single copy of those documents was delivered. If you prefer to receive separate copies of the proxy materials, contact Broadridge Financial Solutions, Inc. at 1-866-540-7095 or in writing at Broadridge, Householding Department, 51 Mercedes Way, Edgewood, New York 11717.

If you are currently a stockholder sharing an address with another stockholder and wish to receive only one copy of future proxy materials for your household, please contact Broadridge at the above phone number or address.

QUESTIONS AND ANSWERS ABOUT THE 2024 ANNUAL MEETING OF STOCKHOLDERS

Who is entitled to vote at the Annual Meeting?

The Record Date for the Annual Meeting is April 16, 2024. You are entitled to vote at the Annual Meeting only if you were a stockholder of record at the close of business on that date, or if you hold a valid proxy for the Annual Meeting. Each outstanding share of common stock is entitled to one vote for all matters before the Annual Meeting. At the close of business on the Record Date, there were 60,964,859 shares of common stock outstanding and entitled to vote at the Annual Meeting.

What is the difference between being a “record holder” and holding shares in “street name”?

A record holder holds shares in his or her name. Shares held in “street name” means shares that are held in the name of a bank or broker on a person’s behalf.

Am I entitled to vote if my shares are held in “street name”?

Yes. If your shares are held by a bank or a brokerage firm, you are considered the “beneficial owner” of those shares held in “street name.” If your shares are held in street name, these proxy materials are being provided to you by your bank or brokerage firm, along with a voting instruction card if you received printed copies of our proxy materials. As the beneficial owner, you have the right to direct your bank or brokerage firm how to vote your shares, and the bank or brokerage firm is required to vote your shares in accordance with your instructions. If your shares are held in “street name” and you would like to vote your shares online at the Annual Meeting, you should contact your bank or brokerage firm to obtain your 16-digit control number or otherwise vote through the bank or brokerage firm.

How many shares must be present to hold the Annual Meeting?

A quorum must be present at the Annual Meeting for any business to be conducted. The presence at the Annual Meeting online or by proxy, of the holders of a majority in voting power of the common stock issued and outstanding and entitled to vote on the Record Date will constitute a quorum.

Who can attend the Annual Meeting?

You may attend and participate in the Annual Meeting by visiting the following website: www.virtualshareholdermeeting.com/LYRA2024. To attend and participate in the Annual Meeting, you will need the 16-digit control number included in your Internet Notice, on your proxy card or on the instructions that accompanied your proxy materials. If your shares are held in “street name,” you should contact your bank or broker to obtain your 16-digit control number or otherwise vote through the bank or broker. If you lose your 16-digit control number, you may join the Annual Meeting as a “Guest” but you will not be able to vote, ask questions or access the list of stockholders as of the Record Date. The meeting webcast will begin promptly at 8:00 a.m. Eastern time. We encourage you to access the meeting prior to the start time. Online check-in will begin at 7:45 a.m., Eastern time, and you should allow ample time for the check-in procedures.

What if a quorum is not present at the Annual Meeting?

If a quorum is not present at the scheduled time of the Annual Meeting, the Chairperson of the Annual Meeting is authorized by our Amended and Restated Bylaws to adjourn the meeting, without the vote of stockholders.

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

It means that your shares are held in more than one account at the transfer agent and/or with banks or brokers. Please vote all of your shares. To ensure that all of your shares are voted, for each Internet Notice or set of proxy materials, please submit your proxy by phone, via the Internet, or, if you received printed copies of the proxy materials, by signing, dating and returning the enclosed proxy card in the enclosed envelope.

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How do I vote?

Stockholders of Record. If you are a stockholder of record, you may vote:

- By Internet - You can vote over the Internet at www.proxyvote.com by following the instructions on the Internet Notice or proxy card.
- By Telephone - You can vote by telephone by calling 1-800-690-6903 and following the instructions on the proxy card.
- By Mail - You can vote by mail by signing, dating and mailing the proxy card, which you may have received by mail.
- Electronically at the Meeting - If you attend the meeting online, you will need the 16-digit control number included in your Internet Notice, on your proxy card or on the instructions that accompanied your proxy materials to vote electronically during the meeting.

Internet and telephone voting facilities for stockholders of record will be made available 24 hours a day and will close at 11:59 p.m., Eastern time, on Wednesday, June 12, 2024. To participate in the Annual Meeting, including to vote via the Internet or telephone, you will need the 16-digit control number included on your Internet Notice, on your proxy card or on the instructions that accompanied your proxy materials.

Whether or not you expect to attend the Annual Meeting online, we urge you to vote your shares as promptly as possible to ensure your representation and the presence of a quorum at the Annual Meeting. If you submit your proxy, you may still decide to attend the Annual Meeting and vote your shares electronically.

Beneficial Owners of Shares Held in "Street Name." If your shares are held in "street name" through a bank or broker, you will receive instructions on how to vote from the bank or broker. You must follow their instructions in order for your shares to be voted. Internet and telephone voting also may be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you would like to vote your shares online at the Annual Meeting, you should contact your bank or broker to obtain your 16-digit control number or otherwise vote through the bank or broker. If you lose your 16-digit control number, you may join the Annual Meeting as a "Guest" but you will not be able to vote, ask questions or access the list of stockholders as of the Record Date. You will need to obtain your own Internet access if you choose to attend the Annual Meeting online and/or vote over the Internet.

Can I change my vote after I submit my proxy?

Yes.

If you are a registered stockholder, you may revoke your proxy and change your vote:

- by submitting a duly executed proxy bearing a later date;
- by granting a subsequent proxy through the Internet or telephone;
- by giving written notice of revocation to the Secretary of Lyra prior to or at the Annual Meeting; or
- by voting online at the Annual Meeting.

Your most recent proxy card or Internet or telephone proxy is the one that is counted. Your attendance at the Annual Meeting by itself will not revoke your proxy unless you give written notice of revocation to the Secretary before your proxy is voted or you vote online at the Annual Meeting.

If your shares are held in street name, you may change or revoke your voting instructions by following the specific directions provided to you by your bank or broker, or you may vote online at the Annual Meeting using your 16-digit control number or otherwise voting through your bank or broker.

Who will count the votes?

A representative of Broadridge Financial Solutions, Inc., our inspector of election, will tabulate and certify the votes.

What if I do not specify how my shares are to be voted?

If you submit a proxy but do not indicate any voting instructions, the persons named as proxies will vote in accordance with the recommendations of the Board. The Board's recommendations are indicated on page 2 of this proxy statement, as well as with the description of each proposal in this proxy statement.

Will any other business be conducted at the Annual Meeting?

We know of no other business that will be presented at the Annual Meeting. If any other matter properly comes before the stockholders for a vote at the Annual Meeting, however, the proxy holders named on the Company's proxy card will vote your shares in accordance with their best judgment.

What if during the check-in time or during the Annual Meeting I have technical difficulties or trouble accessing the virtual meeting website?

We will have technicians ready to assist you with any technical difficulties you may have accessing the virtual meeting website, and the information for assistance will be located on www.virtualshareholdermeeting.com/LYRA2024.

Will there be a question and answer session during the Annual Meeting?

As part of the Annual Meeting, we will hold a live Q&A session, during which we intend to answer appropriate questions submitted by stockholders during the meeting that are pertinent to the Company and the meeting matters as time permits. The Company will endeavor to answer as many questions submitted by stockholders as time permits. Only stockholders that have accessed the Annual Meeting as a stockholder (rather than as a "Guest") by following the procedures outlined above in "Who can attend the Annual Meeting?" will be permitted to submit questions during the Annual Meeting. Each stockholder is limited to no more than two questions. Questions should be succinct and only cover a single topic. We will not address questions that are, among other things:

- irrelevant to the business of the Company or to the business of the Annual Meeting;
- related to material non-public information of the Company, including the status or results of our business since our last Quarterly Report on Form 10-Q;
- related to any pending, threatened or ongoing litigation;
- related to personal grievances;
- derogatory references to individuals or that are otherwise in bad taste;
- substantially repetitious of questions already made by another stockholder;
- in excess of the two question limit;
- in furtherance of the stockholder's personal or business interests; or
- out of order or not otherwise suitable for the conduct of the Annual Meeting as determined by the Chair or Secretary in their reasonable judgment.

Additional information regarding the Q&A session will be available in the "Rules of Conduct" available on the Annual Meeting webpage for stockholders that have accessed the Annual Meeting as a stockholder (rather than as a "Guest") by following the procedures outlined above in "Who can attend the Annual Meeting?".

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How many votes are required for the approval of the proposals to be voted upon and how will abstentions and broker non-votes be treated?

Proposal	Votes required	Effect of Votes Withheld / Abstentions and Broker Non-Votes
<u>Proposal 1:</u> Election of Directors	The plurality of the votes cast. This means that the two nominees receiving the highest number of affirmative “FOR” votes will be elected as Class I Directors.	Votes withheld and broker non-votes will have no effect.
<u>Proposal 2:</u> Ratification of Appointment of Independent Registered Public Accounting Firm	The affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively.	Abstentions will have no effect. We do not expect any broker non-votes on this proposal.
<u>Proposal 3:</u> Approval of an amendment to our Restated Certificate of Incorporation to provide for the exculpation of officers	The affirmative vote of the holders of a majority of the common stock outstanding and entitled to vote.	Abstentions and broker non-votes have the effect of votes against this proposal.

What is a “vote withheld” and an “abstention” and how will votes withheld and abstentions be treated?

A “vote withheld,” in the case of the proposal regarding the election of directors, or an “abstention,” in the case of the proposal regarding the ratification of the appointment of BDO USA, P.C. as our independent registered public accounting firm and the proposal regarding an amendment to our Restated Certificate of Incorporation, represents a stockholder’s affirmative choice to decline to vote on a proposal. Votes withheld and abstentions are counted as present and entitled to vote for purposes of determining a quorum. Votes withheld have no effect on the election of directors. Abstentions have no effect on the ratification of the appointment of BDO USA, P.C. as our independent registered public accounting firm. Abstentions have the effect of votes against the proposal to amend our Restated Certificate of Incorporation to provide for the exculpation of officers.

What are broker non-votes and do they count for determining a quorum?

Generally, broker non-votes occur when shares held by a broker in “street name” for a beneficial owner are not voted with respect to a particular proposal because the broker (1) has not received voting instructions from the beneficial owner and (2) lacks discretionary voting power to vote those shares. A broker is entitled to vote shares held for a beneficial owner on routine matters, such as the ratification of the appointment of BDO USA, P.C. as our independent registered public accounting firm, without instructions from the beneficial owner of those shares. On the other hand, absent instructions from the beneficial owner of such shares, a broker is not entitled to vote shares held for a beneficial owner on non-routine matters, such as the election of directors and the amendment to our Restated Certificate of Incorporation to provide for the exculpation of officers. Broker non-votes count for purposes of determining whether a quorum is present.

Where can I find the voting results of the Annual Meeting?

We plan to announce preliminary voting results at the Annual Meeting and we will report the final results in a Current Report on Form 8-K, which we intend to file with the SEC after the Annual Meeting.

PROPOSALS TO BE VOTED ON

Proposal 1: Election of Directors

At the Annual Meeting, two (2) Class I Directors are to be elected to hold office until our annual meeting of stockholders to be held in 2027 and until each such director's respective successor is elected and qualified or until each such director's earlier death, resignation or removal.

We currently have eight (8) directors on our Board, including two (2) Class I Directors. Our current Class I Directors are Konstantin Poukalov and Nancy L. Snyderman, M.D., FACS, who have served on our Board since January 2020 and October 2020, respectively, each of whom has been nominated by the Board for election as Class I Directors at the Annual Meeting.

The proposal regarding the election of directors requires the approval of a plurality of the votes cast. This means that the two nominees receiving the highest number of affirmative "FOR" votes will be elected as Class I Directors. Votes withheld and broker non-votes are not considered to be votes cast and, accordingly, will have no effect on the outcome of the vote on this proposal.

As set forth in our Restated Certificate of Incorporation, the Board of Directors is divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. The current class structure is as follows: Class I, whose current term will expire at the 2024 Annual Meeting of Stockholders and, if elected at the 2024 Annual Meeting of Stockholders, whose subsequent term will expire at the 2027 Annual Meeting of Stockholders; Class II, whose current term will expire at the 2025 Annual Meeting of Stockholders; and Class III, whose current term will expire at the 2026 Annual Meeting of Stockholders.

The current Class I Directors are Konstantin Poukalov and Nancy L. Snyderman, M.D., FACS; the current Class II Directors are Michael Altman, C. Ann Merrifield and Harlan W. Waksal, M.D.; and the current Class III Directors are Maria Palasis, Ph.D., W. Bradford Smith and James R. Tobin.

Our Restated Certificate of Incorporation and our Amended and Restated Bylaws provide that the authorized number of directors may be changed from time to time by the Board. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our Board into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our Company. Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of our outstanding voting stock entitled to vote in the election of directors.

If you submit a proxy but do not indicate any voting instructions, the persons named as proxies will vote the shares of common stock represented thereby for the election as Class I Directors of the persons whose names and biographies appear below. In the event that any of Mr. Poukalov or Dr. Snyderman should become unable to serve, or for good cause will not serve, as a director, it is intended that votes will be cast for a substitute nominee designated by the Board or the Board may elect to reduce its size. The Board has no reason to believe that any of Mr. Poukalov or Dr. Snyderman will be unable to serve if elected. Each of Mr. Poukalov and Dr. Snyderman has consented to being named in this proxy statement and to serve if elected.

Vote required

The proposal regarding the election of directors requires the approval of a plurality of the votes cast. This means that the two nominees receiving the highest number of affirmative "FOR" votes will be elected as Class I Directors.

Votes withheld and broker non-votes are not considered to be votes cast and, accordingly, will have no effect on the outcome of the vote on this proposal.

Recommendation of the Board of Directors



The Board of Directors unanimously recommends a vote FOR the election of each of the below Class I Director nominees.

Nominees for Class I Director (terms to expire at the 2027 Annual Meeting of Stockholders)

The current members of the Board who are also nominees for election to the Board as Class I Directors are as follows:

<u>Name</u>	<u>Age</u>	<u>Served as a Director Since</u>	<u>Position with Lyra</u>
Konstantin Poukalov	40	2020	Director
Nancy L. Snyderman, M.D., FACS	72	2020	Director

The principal occupations and business experience, for at least the past five years, of each Class I Director nominee are as follows:

Konstantin Poukalov

Konstantin Poukalov has served as a member of our Board since January 2020. Since March 2019, Mr. Poukalov has served as Managing Director at Perceptive Advisors, a life sciences focused investment firm. Since October 2019, Mr. Poukalov has served on the board of directors of LianBio, a biotechnology company, as Executive Chairman. From July 2012 to October 2018, Mr. Poukalov served in roles of increasing responsibility at Kadmon Holdings, Inc., a biopharmaceutical company, most recently serving as Executive Vice President and Chief Financial Officer from July 2014 to October 2018. Mr. Poukalov holds a B.S. in Electrical Engineering from Stony Brook University. We believe that Mr. Poukalov's extensive financial and industry experience qualify him to serve on our Board.

Nancy L. Snyderman, M.D., FACS

Nancy L. Snyderman, M.D., FACS has served as a member of our Board since October 2020. Dr. Snyderman has also served on the boards of directors of Axonics Inc., a medical device company, since April 2019 and Alkermes plc, a biopharmaceutical company, since May 2016. From 2006 to 2018, Dr. Snyderman served as an advisory board member to GE's Healthymagination, General Electric Company's healthcare initiative. From 2003 to 2008, Dr. Snyderman also served as a senior vice president for corporate communications at Johnson & Johnson. Dr. Snyderman is a board-certified Otolaryngologist-Head and Neck surgeon and clinical researcher and has had academic appointments at the University of Pennsylvania and the University of California-San Francisco. From 2016 to 2018, she served as a consulting professor at the Center for Innovation for Global Health at Stanford University. Dr. Snyderman is an Emmy award winning medical correspondent, having worked at ABC News from 1987 to 2003 and later as chief medical editor at NBC News from 2004 to 2015. Dr. Snyderman holds a B.A. in Microbiology from Indiana University and a M.D. from the University of Nebraska Medical Center and has completed residencies in Pediatrics and Otolaryngology Head and Neck Surgery at the University of Pittsburgh. We believe that Dr. Snyderman's extensive experience as an executive at a pharmaceutical company, as well as her roles in academia and as an advisor to policy organizations, qualifies her to serve on our Board.

Continuing members of the Board of Directors:**Class II Directors (terms to expire at the 2025 Annual Meeting of Stockholders)**

The current members of the Board of Directors who are Class II Directors are as follows:

<u>Name</u>	<u>Age</u>	<u>Served as a Director Since</u>	<u>Position with Lyra</u>
Michael Altman	42	2018	Director
C. Ann Merrifield	73	2019	Director
Harlan Waksal, M.D.	71	2022	Executive Chair and Chairperson of the Board

The principal occupations and business experience, for at least the past five years, of each Class II Director are as follows:

Michael Altman

Michael Altman has served as a member of our Board since June 2018. Since 2007, Mr. Altman has been employed on the investment team at Perceptive Advisors, a life sciences focused investment firm, where he currently serves as Managing Director and focuses on medical devices, diagnostics, digital health and specialty pharmaceutical investments. Since October 2018, Mr. Altman has also served as Chief Financial Officer and member of the board of directors of ARYA Sciences Acquisition Corp. IV, a special purpose acquisition company. Mr. Altman served as a member of the board of directors of ARYA Sciences Acquisition Corp. I, II and III, special purpose acquisition companies, from October 2018 until July 2020, October 2020 and July 2021, respectively. From October 2005 to October 2007, Mr. Altman served as a healthcare trader and analyst at First New York Securities. Since June 2021, Mr. Altman has served on the board of directors of Nautilus Biotechnologies, Inc., a biotechnology company. Mr. Altman has also served on the board of directors of Vitruvius Therapeutics, Inc., a pharmaceutical company, since January 2018. Mr. Altman holds a B.S. in Business Administration from the University of Vermont and is a CFA Charter Holder. We believe that Mr. Altman's broad operational and transactional experience qualifies him to serve on our Board.

C. Ann Merrifield

C. Ann Merrifield has served as a member of our Board since September 2019. Ms. Merrifield has also served as a member of the boards of directors for a portfolio of public and private companies in the life sciences sector, which include InVivo Therapeutics Holdings Corp., since November 2014, and Flexion Therapeutics, Inc., from June 2014 to November 2021 until it was acquired by Pacira BioSciences. From July 2015 to August 2018, she served as a director of Juniper Pharmaceuticals, Inc., a healthcare company, until it was acquired by Catalent, Inc. and from December 2016 to January 2019, she served as a director of Veritas Genetics, Inc. Ms. Merrifield also serves as a Trustee for MassMutual Premier, Select and MML Series Investment Funds, the Huntington Theatre Company, the YMCA of Greater Boston, and the International Institute of New England. From November 2012 to July 2014, Ms. Merrifield served as President, Chief Executive Officer and director of PathoGenetix Inc., a genomics company, which voluntarily filed for Chapter 7 bankruptcy in July 2014. Before that, Ms. Merrifield spent 18 years at Genzyme Corporation, serving in several leadership roles, including President of Genzyme Biosurgery, President of Genzyme Genetics and Senior Vice President, Business Excellence. Ms. Merrifield holds a B.A. in Zoology and a Master of Education from the University of Maine and an M.B.A. from the Tuck School of Business at Dartmouth College. We believe that Ms. Merrifield's extensive industry experience qualifies her to serve on our Board.

Harlan W. Waksal, M.D.

Harlan W. Waksal, M.D. has served as our Executive Chair since February 2022 and was elected to our Board in February 2022. Prior to his role with us as Executive Chair, Dr. Waksal served as President and Chief Executive

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Officer of Kadmon Holdings, Inc., or Kadmon, a biopharmaceutical company, from August 2014 and a director since 2013 until its acquisition by Sanofi in November 2021. Prior to joining Kadmon as an employee, Dr. Waksal served as President and Sole Proprietor of Waksal Consulting LLC from 2003 to 2014. From 2011 to 2014, Dr. Waksal served as Executive Vice President, Business and Scientific Affairs at Acasti Pharma, Inc., a publicly traded biopharmaceutical company, and as a consultant to Neptune Technologies & Bioresources, Inc., a publicly traded life sciences company and the parent company of Acasti. Dr. Waksal co-founded ImClone Systems (“ImClone”) in 1987, a publicly traded biopharmaceutical company acquired by Eli Lilly and Company in 2008. Dr. Waksal served in senior roles at ImClone, including: President (1987 to 1994); Executive Vice President and Chief Operating Officer (1994 to 2002); and President, Chief Executive Officer and Chief Operating Officer (2002 to 2003). Dr. Waksal also served as a Director of ImClone from 1987 to 2005. Dr. Waksal served on the boards of Oberlin College and Sevion Therapeutics through March 2016 and the boards of Acasti and Neptune through February 2016 and July 2015, respectively. Dr. Waksal’s additional roles include serving as a Member of the Board of Directors at Neptune Technologies & Bioresources, Observer of the Board of Directors at NeuroBiopharm, Chairman of the American Committee for the Weizmann Institute of Science and Member of the Technology Advisory Board at the New Jersey Edison Innovation Fund. Dr. Waksal received his B.A. from Oberlin College and his M.D. from Tufts University School of Medicine. He completed his training in internal medicine at New England Medical Center and in pathology at Kings County Hospital Center in Brooklyn. We believe Dr. Waksal’s extensive management experience in the life science industry and drug development experience provides him with the qualifications and skills to serve on our Board.

Class III Directors (terms to expire at the 2026 Annual Meeting of Stockholders)

The current members of the Board of Directors who are Class III Directors are as follows:

Name	Age	Served as a Director Since	Position with Lyra
Maria Palasis, Ph. D.	59	2015	President and Chief Executive Officer and Director
W. Bradford Smith	68	2019	Director
James R. Tobin	79	2022	Director

The principal occupations and business experience, for at least the past five years, of each Class III Director are as follows:

Maria Palasis, Ph.D.

Maria Palasis, Ph.D. has served as our President and Chief Executive Officer and a member of our Board since January 2015. Prior to her role with us as President and Chief Executive Officer, Dr. Palasis held positions of increasing responsibility, the most recent of which was Executive Vice President and Chief Technology Officer from 2011 to 2015. Before that, in 2008, Dr. Palasis joined Arsenal Medical, Inc., a biotechnology company, as Executive Vice President and subsequently served as President and Chief Executive Officer and a member of the board of directors of Arsenal Medical from January 2015 to June 2018. Before that, from November 1995 to January 2008, Dr. Palasis was employed with the title of Director at Boston Scientific Corporation, a medical device company, where she managed a portfolio of external biotech and medical device investments and led the development of several combination therapies. Dr. Palasis holds a B.S. and Ph.D. in Chemical Engineering from the University of Cincinnati, and she held a postdoctoral fellowship in molecular biology at the University of Cincinnati School of Medicine. We believe that Dr. Palasis’ experience in the industry and knowledge of our Company qualifies her to serve on our Board.

W. Bradford Smith

W. Bradford Smith has served as a member of our Board since November 2019. From November 2023 to March 2024, Mr. Smith served as a consultant to Homology Medicines, Inc. (NASDAQ: FIXX), where he previously

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served as Chief Financial Officer, Chief Business Officer and Treasurer from March 2022 until November 2023, when the company announced it signed a merger agreement with Q32 Bio, Inc. He also served as Homology's Chief Financial Officer and Treasurer from April 2017 to March 2022 and as Secretary from July 2017 to June 2020. From March 2014 to April 2017, Mr. Smith was Chief Financial Officer of Ocular Therapeutix, Inc., a biopharmaceutical company, where he led the company's strategic financings, including an IPO and subsequent follow-on offerings, and completed a development and commercialization deal with a major biopharmaceutical company. Prior to joining Ocular Therapeutix, Mr. Smith served as Chief Financial Officer of OmniGuide, Inc., a medical device company, from July 2008 to March 2014. Since May 2021, Mr. Smith has served on the board of directors of eGenesis, a private gene editing company. Mr. Smith holds a B.S. in Biology from Tufts University and an M.B.A. from the Whittemore School of Business and Economics at the University of New Hampshire. We believe that Mr. Smith's extensive financial and industry experience qualify him to serve on our Board.

James R. Tobin

James R. Tobin has served as a member of our Board since March 2022. Mr. Tobin is the retired President and CEO of Boston Scientific Corporation, a medical device company, where he served from 1999 to 2009. Prior to Boston Scientific, Mr. Tobin was the President and CEO of Biogen Inc., and, from 1994 to 1997, its President and Chief Operating Officer. Before Biogen, Mr. Tobin spent 22 years with Baxter International Inc., rising from Financial Analyst to President and Chief Operating Officer. Mr. Tobin currently serves as Chairman of the Board at TransMedics, Inc. and as a director of Globus Medical Inc., each of which are public companies, and as a director at Xenter, Inc., a private company. Mr. Tobin has also served on the boards of Oxford Immunotec, Inc., from 2014 to 2021, Corindus Vascular Robotics, from 2018 to 2019, Curis, Inc., from 1995 to 2015, Medical Simulation Corp, from 2012 to 2018, CardioDX, Inc., from 2014 to 2017, Chiasma, Inc., from 2015 to 2016, and Aptus Endosystems, Inc. from 2011 to 2015. Mr. Tobin holds an AB from Harvard College and an M.B.A. from Harvard Business School. Mr. Tobin also served as a Lieutenant in the U.S. Navy. We believe Mr. Tobin is qualified to serve on our Board because of his decades of experience as President and Chief Executive Officer or Chief Operating Officer of three large biotechnology and medical device companies.

Board Diversity Matrix

The following matrix is provided in accordance with applicable Nasdaq Stock Market LLC ("Nasdaq") listing rules and presents our Board diversity statistics, as self-disclosed by our directors.

Board Diversity Matrix (As of [●])

Total Number of Directors	8			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	3	5	0	0
Part II: Demographic Background				
African American or Black	0	0	0	0
Alaskan Native or Native American	0	0	0	0
Asian	0	0	0	0
Hispanic or Latinx	0	0	0	0
Native Hawaiian or Pacific Islander	0	0	0	0
White	3	5	0	0
Two or More Races or Ethnicities	0	0	0	0
LGBTQ+			0	
Did Not Disclose Demographic Background			0	

Proposal 2: Ratification of Appointment of Independent Registered Public Accounting Firm

Our Audit Committee has appointed BDO USA, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2024. Our Board has directed that this appointment be submitted to our stockholders for ratification at the Annual Meeting. Although ratification of our appointment of BDO USA, P.C. is not required, we value the opinions of our stockholders and believe that stockholder ratification of our appointment is a good corporate governance practice.

BDO USA, P.C. also served as our independent registered public accounting firm for the fiscal year ended December 31, 2023. Neither the accounting firm nor any of its members has any direct or indirect financial interest in or any connection with us in any capacity other than as our auditors, providing audit and non-audit related services. A representative of BDO USA, P.C. is expected to attend the 2024 Annual Meeting and to have an opportunity to make a statement and be available to respond to appropriate questions from stockholders.

In the event that the appointment of BDO USA, P.C. is not ratified by the stockholders, the Audit Committee will consider this fact when it appoints the independent registered public accounting firm for the fiscal year ending December 31, 2025. Even if the appointment of BDO USA, P.C. is ratified, the Audit Committee retains the discretion to appoint a different independent auditor at any time if it determines that such a change is in the interest of the Company.

Vote Required

This proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively. Abstentions are not considered to be votes cast and, accordingly, will have no effect on the outcome of the vote on this proposal. Because brokers have discretionary authority to vote on the ratification of the appointment of BDO USA, P.C., we do not expect any broker non-votes in connection with this proposal.

Recommendation of the Board of Directors



The Board of Directors unanimously recommends a vote FOR the ratification of the appointment of BDO USA, P.C. as our independent registered public accounting firm for the fiscal year ending December 31, 2024.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee has reviewed the audited consolidated financial statements of Lyra Therapeutics, Inc., a Delaware corporation (the “Company”), for the fiscal year ended December 31, 2023 and has discussed these financial statements with management and the Company’s independent registered public accounting firm. The Audit Committee has also received from, and discussed with, the Company’s independent registered public accounting firm the matters that they are required to provide to the Audit Committee, including the matters required to be discussed by the Public Company Accounting Oversight Board (“PCAOB”) and the Securities and Exchange Commission.

The Company’s independent registered public accounting firm also provided the Audit Committee with a formal written statement required by the applicable requirements of the PCAOB describing all relationships between the independent registered public accounting firm and the Company, including the disclosures required by the applicable requirements of the PCAOB regarding the independent registered public accounting firm’s communications with the Audit Committee concerning independence. In addition, the Audit Committee discussed with the independent registered public accounting firm its independence from the Company.

Based on its discussions with management and the independent registered public accounting firm, and its review of the representations and information provided by management and the independent registered public accounting firm, the Audit Committee recommended to the Board of Directors that the audited consolidated financial statements be included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

W. Bradford Smith (Chair)
James R. Tobin

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

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FEES AND OTHER MATTERS

The following table summarizes the fees of BDO USA, P.C., our independent registered public accounting firm, billed to us for each of the last two fiscal years.

Fee Category	2023	2022
Audit Fees ⁽¹⁾	\$525,770	\$396,977
Tax Fees ⁽²⁾	—	12,775
Total Fees	<u>\$525,770</u>	<u>\$409,752</u>

- (1) For 2023 and 2022, audit fees consist of fees for the audit of our financial statements, the review of the interim financial statements included in our quarterly reports on Form 10-Q, and other professional services provided in connection with statutory and regulatory filings or engagements.
- (2) For 2022, tax fees consisted of fees for tax-related services, including tax compliance and tax advice.

Audit Committee Pre-Approval Policy and Procedures

The Audit Committee has adopted a policy (the “Pre-Approval Policy”) that sets forth the procedures and conditions pursuant to which audit and non-audit services proposed to be performed by the independent auditor may be pre-approved. The Pre-Approval Policy generally provides that we will not engage our independent auditor, BDO USA, P.C. to render any audit, audit-related, tax or permissible non-audit services unless the service is either (i) explicitly approved by the Audit Committee (“specific pre-approval”) or (ii) entered into pursuant to the pre-approval policies and procedures described in the Pre-Approval Policy (“general pre-approval”). Unless a type of service to be provided by BDO USA, P.C. has received general pre-approval under the Pre-Approval Policy, it requires specific pre-approval by the Audit Committee or by a designated member of the Audit Committee to whom the committee has delegated the authority to grant pre-approvals. Any proposed services exceeding pre-approved cost levels or budgeted amounts will also require specific pre-approval. For both types of pre-approval, the Audit Committee will consider whether such services are consistent with the SEC’s rules on auditor independence. The Audit Committee will also consider whether the independent auditor is best positioned to provide the most effective and efficient service, for reasons such as its familiarity with the Company’s business, people, culture, accounting systems, risk profile and other factors, and whether the service might enhance the Company’s ability to manage or control risk or improve audit quality. All such factors will be considered as a whole, and no one factor should necessarily be determinative. The Audit Committee periodically reviews and generally pre-approves any services (and related fee levels or budgeted amounts) that may be provided by BDO USA, P.C. without first obtaining specific pre-approvals from the Audit Committee or the Chair of the Audit Committee. The Audit Committee may revise the list of general pre-approved services from time to time, based on subsequent determinations.

Proposal 3: Approval of Amendment to our Restated Certificate of Incorporation to Provide for the Exculpation of Officers from Breaches of Fiduciary Duty to the Fullest Extent Permitted by the General Corporation Law of the State of Delaware

General

As part of its continuing review of our corporate governance standards and practices, the Board unanimously approved and declared advisable, subject to stockholder approval, an amendment (the “Amendment”) to the Company’s Restated Certificate of Incorporation to update the current exculpation and liability provisions in Article Seventh of our Restated Certificate of Incorporation to reflect developing law. A copy of the Amendment is attached to this proxy statement as Annex A-1, and a copy of the Amendment, marked to show changes against current Article Seventh of our Restated Certificate of Incorporation, is attached to this proxy statement as Annex A-2.

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Effective August 1, 2022, Section 102(b)(7) of the General Corporation Law of the State of Delaware (the “DGCL”) was amended (as amended, “Amended Section 102(b)(7)”) to enable a corporation to include in its certificate of incorporation a provision exculpating certain corporate officers from liability for breach of the fiduciary duty of care in certain circumstances. Previously, Section 102(b)(7) of the DGCL provided for the ability to exculpate directors only and our Restated Certificate of Incorporation currently limits the monetary liability of our directors in certain circumstances consistent with Section 102(b)(7) of the DGCL. Amended Section 102(b)(7) allows for the exculpation of certain officers only in connection with direct claims brought by stockholders, including class actions, but would not eliminate officers’ monetary liability for breach of fiduciary duty claims brought by the corporation itself or for derivative claims brought by stockholders in the name of the corporation. Further, Amended Section 102(b)(7) does not permit a corporation to exculpate covered officers from liability for breach of the duty of loyalty, acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, or any transaction in which the officer derived an improper personal benefit. Under Amended Section 102(b)(7), the officers who may be exculpated include a person who (i) is the president, chief executive officer, chief operating officer, chief financial officer, chief legal officer, controller, treasurer or chief accounting officer of the corporation at any time during the course of conduct alleged in the action or proceeding to be wrongful, (ii) is or was identified in the corporation’s public filings with the SEC because such person is or was one of the most highly compensated executive officers of the corporation, or (iii) has consented to services of process in Delaware by written agreement (collectively, “Covered Officers”).

Effect of the Amendment

The proposed Amendment would allow for the exculpation of our Covered Officers to the fullest extent permitted by the DGCL. As described above, this currently means that the proposed Amendment would allow for the exculpation of Covered Officers only in connection with direct claims brought by stockholders, including class actions, but would not eliminate such officers’ monetary liability for breach of fiduciary duty claims brought by the corporation itself or for derivative claims brought by stockholders in the name of the corporation. Further, the Amendment would not limit the liability of Covered Officers for any breach of the duty of loyalty to the corporation or its stockholders, any acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of the law, or any transaction from which a Covered Officer derived an improper personal benefit.

Rationale for Adoption of the Amendment

Our Board believes that adopting the Amendment would better position the Company to attract top officer candidates and retain our current officers. The Amendment would also more closely align the protections available to our officers with those already available to our directors. We believe that failing to adopt the Amendment could impact our recruitment and retention of exceptional officer candidates who conclude that the potential exposure to liabilities, costs of defense, and other risks of proceedings exceeds the benefits of serving as an officer of the Company.

In addition, adopting the Amendment would enable the officers to exercise their business judgment in furtherance of the interests of the stockholders without the potential for distraction posed by the risk of personal liability. The nature of the role of officers often requires them to make decisions on crucial matters. Frequently, officers must make decisions in response to time-sensitive opportunities and challenges, which can create substantial risk of investigations, claims, actions, suits, or proceedings seeking to impose liability based on hindsight, especially in the current litigious environment and regardless of merit. Limiting our current and prospective officers’ concern about personal risk would empower officers to best exercise their business judgment in furtherance of stockholder interests and better position the Company to retain our current officers and attract top officer candidates. Enhancing our ability to retain and attract experienced officers is in the best interests of the Company and its stockholders and we should seek to assure such persons that exculpation under certain circumstances is available.

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If our stockholders approve the Amendment, our Board has authorized our officers to file a Certificate of Amendment with the Delaware Secretary of State, which we anticipate doing as soon as practicable following stockholder approval of the Amendment at the Annual Meeting, and the Certificate of Amendment would become effective upon acceptance by the Delaware Secretary of State.

If our stockholders do not approve the Amendment, the Company's current exculpation provisions relating to directors will remain in place, and the Certificate of Amendment will not be filed with the Delaware Secretary of State. However, even if our stockholders approve the Amendment, our Board retains discretion under Delaware law to determine when to file the Certificate of Amendment with the Delaware Secretary of State and to abandon the Amendment notwithstanding prior stockholder approval of the Amendment.

Vote Required

This proposal requires the affirmative vote of the holders of a majority of the Common Stock outstanding and entitled to vote at the Annual Meeting. Abstentions and broker non-votes will have the same effect as votes against this proposal.

Recommendation of the Board of Directors



The Board of Directors unanimously recommends a vote FOR the Amendment of our Restated Certificate of Incorporation to provide for the exculpation of officers from breaches of fiduciary duty to the fullest extent permitted by the General Corporation Law of the State of Delaware.

EXECUTIVE OFFICERS

The following table identifies our current executive officers.

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>In Current Position Since</u>
Harlan W. Waksal, M.D.	70	Executive Chair and Chairperson of the Board	February 2022
Maria Palasis, Ph.D.	59	President and Chief Executive Officer and Director	January 2015
Jason Cavalier	51	Chief Financial Officer and Treasurer	September 2021
Richard Nieman, M.D.	61	Chief Medical Officer	July 2022
John E. Bishop, Ph.D.	62	Chief Technology Officer	February 2023

The following are brief biographies describing the backgrounds of our executive officers.

The biographies for Dr. Waksal and Dr. Palasis appear above.

Jason Cavalier has served as our Chief Financial Officer and Treasurer since September 2021. He also served as our Secretary from September 2021 to March 2024. Prior to joining our Company, Mr. Cavalier served as a Managing Director and the Head of Life Sciences Mergers and Acquisitions at Cantor Fitzgerald & Co., where he led transactions across the medical technology, diagnostics and biopharma sectors, from 2017 to 2021. Prior to that, Mr. Cavalier served as a Director, Mergers and Acquisitions, at RBC Capital Markets LLC from 2009 to 2017, where he primarily focused on advising senior management and boards of directors on a range of strategic advisory assignments including mergers, acquisitions, divestitures and leveraged buyouts. Mr. Cavalier has also held positions of increasing responsibility within the investment banking divisions of Barclays Capital Inc., Bear Stearns & Co. Inc., and Lehman Brothers Inc. Mr. Cavalier received a B.S. in Applied Economics and Business Management from Cornell University and an M.B.A. from Columbia University Business School.

Richard Nieman, M.D. has served as our Chief Medical Officer since July 2022. Dr. Nieman, a pulmonologist by training, has had prior leadership roles as SVP & Worldwide Medical Head of Immunology at Bristol Myers Squibb (BMS) from March to November 2020, Head of R&D China at BMS, Global Medical Officer & Head of Medical at Teva from January 2013 to March 2018, and Head of Asia-Pacific Medical at Bayer from January 2009 to December 2012. At Teva, he led the company's medical and health economic and outcome research (HEOR) function of 550 professionals and was a member of the Specialty Executive Team. He has been involved in bringing numerous important medicines to the market in the U.S. and Europe, including Cinquair in asthma, Copaxone 40 mg 3x/week in multiple sclerosis, Austedo in movement disorders, Ajoy in migraine and Xarelto in thrombosis and stroke prevention. Richard is a Fellow of the UK Royal College of Physicians, a Visiting Senior Lecturer at the School of Cancer and Pharmaceutical Sciences, Kings College, London, and was a Visiting Professor at Fudan University School of Public Health in Shanghai, China. He has published extensively and trained and practiced medicine in the UK.

John E. Bishop, Ph.D. has served as our Chief Technology Officer since February 2023. Dr. Bishop previously served as the Senior Vice President, Chief Technology Officer at Forma Therapeutics Holdings, Inc. (Forma) from June 2021 to February 2023. Prior to joining Forma, he served as Senior Vice President of Pharmaceutical Sciences at Epizyme, Inc. ("Epizyme") from May 2017 to May 2021, where he was responsible for the CMC and quality assurance functions. Prior to Epizyme, Dr. Bishop was Executive Vice President of Pharmaceutical Sciences at Genocoea Biosciences Inc. from May 2016 to May 2017. Prior to that, he held positions of increasing responsibility at Momenta Pharmaceuticals, Inc., including Senior Vice President, Pharmaceutical Sciences from December 2006 to May 2016 and Vice President, Pharmaceutical Sciences and Manufacturing from November 2004 to December 2006. Dr. Bishop received his B.S. magna cum laude in Chemistry and German from Tufts University, his Ph.D. in Organic Chemistry from University of California, Berkeley and his M.B.A. from Northeastern University.

CORPORATE GOVERNANCE

General

Our Board has adopted Corporate Governance Guidelines, a Code of Business Conduct and Ethics, and charters for our Nominating and Corporate Governance Committee, Audit Committee and Compensation Committee to assist the Board in the exercise of its responsibilities and to serve as a framework for the effective governance of the Company. You can access our current committee charters, our Corporate Governance Guidelines, and our Code of Business Conduct and Ethics in the “Governance” section of the “Investors & News” page of our website located at www.lyratx.com, or by writing to our Secretary at our offices at 480 Arsenal Way, Watertown, Massachusetts 02472.

Board Composition

Our Board currently consists of eight (8) members: Michael Altman, C. Ann Merrifield, Maria Palasis, Ph.D., Konstantin Poukalov, W. Bradford Smith, Nancy L. Snyderman, M.D., FACS, James R. Tobin and Harlan W. Waksal, M.D. As set forth in our Restated Certificate of Incorporation, the Board is divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our Restated Certificate of Incorporation and Amended and Restated Bylaws provide that the authorized number of directors may be changed only by resolution of the Board. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our Board into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our Company. Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of our capital stock entitled to vote in the election of directors.

Director Independence

Our Board has determined that each of Michael Altman, C. Ann Merrifield, Konstantin Poukalov, W. Bradford Smith, Nancy L. Snyderman, M.D., FACS, James R. Tobin and, for the period in which he served until his resignation on April 15, 2024, Edward T. Anderson, qualify as “independent” in accordance with the listing requirements of Nasdaq. The Nasdaq independence definition includes a series of objective tests, including that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his family members has engaged in various types of business dealings with us. In addition, as required by Nasdaq rules, our Board has made a subjective determination as to each independent director that no relationships exist, which, in the opinion of our Board, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our Board reviewed and discussed information provided by the directors and us with regard to each director’s business and personal activities and relationships as they may relate to us and our management, including that Mr. Altman and Mr. Poukalov are affiliated with certain of our significant stockholders. Maria Palasis, Ph.D. and Harlan W. Waksal, M.D. are not independent. There are no family relationships among any of our directors or executive officers.

Director Candidates

The Nominating and Corporate Governance Committee is primarily responsible for searching for qualified director candidates for election to the Board and filling vacancies on the Board. To facilitate the search process, the Nominating and Corporate Governance Committee may solicit current directors and executives of the Company for the names of potentially qualified candidates or ask directors and executives to pursue their own business contacts for the names of potentially qualified candidates. The Nominating and Corporate Governance

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Committee may also consult with outside advisors or retain search firms to assist in the search for qualified candidates, or consider director candidates recommended by our stockholders. Once potential candidates are identified, the Nominating and Corporate Governance Committee reviews the backgrounds of those candidates, evaluates candidates' independence from the Company and potential conflicts of interest and determines if candidates meet the qualifications desired by the Nominating and Corporate Governance Committee for candidates for election as a director.

In evaluating the suitability of individual candidates (both new candidates and current Board members), the Nominating and Corporate Governance Committee, in recommending candidates for election, and the Board, in approving (and, in the case of vacancies, appointing) such candidates, may take into account many factors, including: personal and professional integrity, ethics and values; experience in corporate management, such as serving as an officer or former officer of a publicly held company; strong finance experience; relevant social policy concerns; experience relevant to the Company's industry; experience as a board member or executive officer of another publicly held company; relevant academic expertise or other proficiency in an area of the Company's operations; diversity of expertise and experience in substantive matters pertaining to the Company's business relative to other board members; diversity of background and perspective, including, but not limited to, with respect to age, gender, race, ethnicity, place of residence and specialized experience; gender identification or identification as an underrepresented minority or as LGBTQ+; practical and mature business judgment, including, but not limited to, the ability to make independent analytical inquiries; and any other relevant qualifications, attributes or skills. The Board evaluates each individual in the context of the Board as a whole, with the objective of assembling a group that can best perpetuate the success of the business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas. In determining whether to recommend a director for re-election, the Nominating and Corporate Governance Committee may also consider the director's past attendance at meetings and participation in and contributions to the activities of the Board.

Stockholders may recommend individuals to the Nominating and Corporate Governance Committee for consideration as potential director candidates by submitting the names of the recommended individuals, together with appropriate biographical information and background materials, to the Nominating and Corporate Governance Committee, c/o Secretary, Lyra Therapeutics, Inc., 480 Arsenal Way, Watertown, Massachusetts 02472. In the event there is a vacancy, and assuming that appropriate biographical and background material has been provided on a timely basis, the Nominating and Corporate Governance Committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

Communications from Stockholders

The Board will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. Our Secretary is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the directors as he or she considers appropriate.

Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that our Secretary and Chairperson of the Board consider to be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we tend to receive repetitive or duplicative communications. Stockholders who wish to send communications on any topic to the Board should address such communications to the Board of Directors in writing: c/o Secretary, Lyra Therapeutics, Inc., 480 Arsenal Way, Watertown, Massachusetts 02472.

Board Leadership Structure and Role in Risk Oversight

Our Board is currently chaired by Harlan W. Waksal, M.D., our Executive Chair. Our Corporate Governance Guidelines provide that, if the chairperson of the Board is a member of management or does not otherwise

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qualify as independent, the independent directors of the Board may elect an independent lead director. James R. Tobin currently serves as our lead director. The lead director's responsibilities include, but are not limited to: presiding over all meetings of the Board of Directors at which the chairperson is not present, including any executive sessions of the independent directors; calling meetings or separate sessions of the independent directors; approving Board meeting schedules and agendas; and acting as the liaison between the independent directors and the chief executive officer and chairperson of the Board. Our Corporate Governance Guidelines further provide flexibility for our Board to modify our leadership structure in the future as it deems appropriate.

Our Board has determined that combining the roles of Chairperson of the Board and Executive Chair is in the best interests of our Company and its stockholders at this time because it promotes unified leadership by Dr. Waksal and allows for a single, clear focus for management to execute the Company's strategy and business plans. For these reasons and because of the strong leadership of Dr. Waksal, our Board has concluded that our current leadership structure is appropriate at this time. However, our Board will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

Risk assessment and oversight are an integral part of our governance and management processes. Our Board encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Management discusses strategic and operational risks at regular management meetings and conducts specific strategic planning and review sessions during the year that include a focused discussion and analysis of the risks facing us. Throughout the year, senior management reviews these risks with the Board at regular Board meetings as part of management presentations that focus on particular business functions, operations or strategies, and presents the steps taken by management to mitigate or eliminate such risks. Our Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various standing committees of the Board that address risks inherent in their respective areas of oversight. In particular, our Board is responsible for monitoring and assessing strategic risk exposure, including business continuity risks, and our Audit Committee is responsible for overseeing our financial and cybersecurity risk exposures and the steps our management has taken to monitor and control these exposures. The Audit Committee also monitors compliance with legal and regulatory requirements and considers and approves or disapproves any related person transactions. Our Nominating and Corporate Governance Committee manages risks associated with the Company's corporate governance framework and the Board's leadership structure, and monitors the effectiveness of the Corporate Governance Guidelines. Our Compensation Committee oversees the management of risks relating to the Company's compensation plans, equity incentive plans and other compensatory arrangements. The Board does not believe that its role in the oversight of our risks affects the Board's leadership structure.

Code of Business Conduct and Ethics

Our Board has adopted a written code of business conduct (the "Code of Business Conduct and Ethics") that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer, and persons performing similar functions. A copy of the Code of Business Conduct and Ethics is available on our website at www.lyratx.com in the "Governance" section of the "Investors & News" page. In addition, we intend to post on our website all disclosures that are required by law or The Nasdaq Stock Market LLC concerning any amendments to, or waivers from, any provision of our Code of Business Conduct and Ethics. We granted no waivers under our Code of Business Conduct and Ethics during the fiscal year 2023.

Anti-Hedging Policy

Our Board has adopted an Insider Trading Compliance Policy, which applies to all of our directors, officers and employees. The policy prohibits our directors, officers and employees and any entities they control from purchasing financial instruments such as prepaid variable forward contracts, equity swaps, collars, and exchange

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funds, or otherwise engaging in transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of the Company's equity securities, or that may cause an officer, director, or employee to no longer have the same objectives as the Company's other stockholders.

Clawback Policy

In accordance with Nasdaq listing standards and Rule 10D-1 under the Exchange Act, our Board has adopted a Policy for Recovery of Erroneously Awarded Compensation (the "Clawback Policy") that applies to our current and former executive officers. Under the Clawback Policy, we are required to recoup the amount of any Erroneously Awarded Compensation (as defined in the Clawback Policy) on a pre-tax basis within a specified lookback period in the event of any accounting Restatement (as defined in the Clawback Policy), subject to limited impracticability exceptions. Covered restatements include both a restatement to correct an error that is material to previously issued financial statements or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period. The amount required to be recovered is the excess of the amount of incentive-based compensation received over the amount that otherwise would have been received had it been determined based on the restated financial measure.

Attendance by Members of the Board of Directors at Meetings

There were seven (7) meetings of the Board of Directors during the fiscal year ended December 31, 2023. During the fiscal year ended December 31, 2023, each director, during the period in which he or she served as a director, attended at least 90% of the aggregate of (i) all meetings of the Board of Directors and (ii) all meetings of the committees on which the director served.

Under our Corporate Governance Guidelines, which is available on our website at www.lyratx.com, a director is expected to spend the time and effort necessary to properly discharge his or her responsibilities. Accordingly, a director is expected to regularly prepare for and attend meetings of the Board and all committees on which the director sits (including separate meetings of the independent directors), with the understanding that, on occasion, a director may be unable to attend a meeting. A director who is unable to attend a meeting of the Board or a committee of the Board is expected to notify the Chairperson of the Board or the Chairperson of the appropriate committee in advance of such meeting, and, whenever possible, participate in such meeting via teleconference in the case of an in-person meeting. We do not maintain a formal policy regarding director attendance at the Annual Meeting; however, it is expected that absent compelling circumstances directors will attend. All of our then incumbent members of the Board attended the 2023 Annual Meeting of Stockholders.

COMMITTEES OF THE BOARD

Our Board has established three standing committees - Audit, Compensation and Nominating and Corporate Governance—each of which operates under a written charter that has been approved by our Board.

The members of each of the Board committees and committee Chairpersons are set forth in the following chart.

Name	Audit	Compensation	Nominating and Corporate Governance
C. Ann Merrifield		X	Chairperson
W. Bradford Smith	Chairperson		X
Nancy L. Snyderman, M.D., FACS	X	X	X
James R. Tobin	X	Chairperson	

Audit Committee

Our Audit Committee’s responsibilities include, among other things:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- coordinating our Board’s oversight of our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk management policies, including overseeing management of the Company’s financial and cybersecurity risks;
- meeting independently with our internal auditing staff, if any, registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by SEC rules.

The Audit Committee charter is available on our website at www.lyratx.com. The members of the Audit Committee are Dr. Snyderman, Mr. Smith and Mr. Tobin. Mr. Smith serves as the Chairperson of the committee. Our Board has affirmatively determined that each of Dr. Snyderman, Mr. Smith, and Mr. Tobin is independent for purposes of serving on an audit committee under Rule 10A-3 promulgated under the Securities and Exchange Act of 1934, as amended (the “Exchange Act”) and Nasdaq rules, including those related to Audit Committee membership. The Board also determined that Mr. Anderson was independent for purposes of serving on an audit committee under Rule 10A-3 promulgated under the Exchange Act and Nasdaq rules, including those related to Audit Committee membership, for the period of time in which he served until his resignation on April 15, 2024.

The members of our Audit Committee meet the requirements for financial literacy under the applicable Nasdaq rules. In addition, our Board has determined that each of Mr. Smith and Mr. Tobin qualifies as an “audit committee financial expert,” as such term is defined in Item 407(d)(5) of Regulation S-K, and under the similar Nasdaq rules requirement that the Audit Committee have a financially sophisticated member.

The Audit Committee met five (5) times in 2023.

Compensation Committee

Our Compensation Committee's responsibilities include, among other things:

- reviewing, modifying (as needed) and approving (or if it deems appropriate, making recommendations to our Board regarding) the overall compensation strategy and policies for the Company;
- evaluating and making recommendations to our Board regarding the compensation plans and programs advisable for the Company, as well as the modification or termination of existing plans and programs;
- determining and recommending to our Board for determination and approval the compensation and other terms of employment of our CEO;
- periodically reviewing the performance of our CEO;
- determining and approving the compensation and other terms of employment for each executive officer;
- making recommendations to our Board regarding the type and amount of compensation to be paid or awarded to non-employee members of our Board;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis," to the extent required; and
- preparing the annual compensation committee report required by SEC rules, to the extent required.

The Compensation Committee generally considers the Chief Executive Officer's recommendations when making decisions regarding the compensation of non-employee directors and executive officers (other than the Chief Executive Officer). Pursuant to the Compensation Committee's charter, which is available on our website at www.lyratx.com, the Compensation Committee has the authority to retain or obtain the advice of compensation consultants, legal counsel and other advisors to assist in carrying out its responsibilities. In 2023, the Compensation Committee engaged Pay Governance LLC, a compensation consulting firm ("Pay Governance"), to assist in making decisions regarding the amount and types of compensation to provide our executive officers and non-employee directors. As part of this process, the Compensation Committee reviewed a compensation assessment provided by Pay Governance comparing our compensation to that of a group of peer companies within our industry and met with Pay Governance to discuss our executive and non-employee director compensation and to receive input and advice. Pay Governance reports directly to the Compensation Committee. The Compensation Committee has considered the adviser independence factors required under SEC rules as they relate to Pay Governance and has determined that Pay Governance's work does not raise a conflict of interest. For 2023, Pay Governance did not provide additional services to us for which the fees exceeded \$120,000.

The Compensation Committee may delegate its authority under its charter to one or more subcommittees as it deems appropriate from time to time. The Compensation Committee may also delegate to an officer the authority to grant equity awards to certain employees, as further described in its charter and subject to the terms of our equity plans.

The members of our Compensation Committee are Ms. Merrifield, Dr. Snyderman and Mr. Tobin. Mr. Tobin serves as the Chairperson of the Compensation Committee. Each member of the Compensation Committee qualifies as an independent director under Nasdaq's heightened independence standards for members of a compensation committee and as a "non-employee director" as defined in Rule 16b-3 of the Exchange Act. The Board also determined that Mr. Anderson qualified as an independent director under Nasdaq's heightened independence standards for members of a compensation committee for the period in which he served until his resignation on April 15, 2024.

The Compensation Committee met four (4) times in 2023.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee's responsibilities include, among other things:

- identifying individuals qualified to become board members;
- recommending to our Board the persons to be nominated for election as directors and to be appointed to each board committee;
- developing and recommending to our Board corporate governance guidelines, and reviewing and recommending to our Board proposed changes to our corporate governance guidelines from time to time;
- reviewing the Board's leadership structure; and
- overseeing a periodic evaluation of our Board.

The Nominating and Corporate Governance Committee charter is available on our website at www.lyratx.com. The members of our Nominating and Corporate Governance Committee are Ms. Merrifield, Mr. Smith and Dr. Snyderman. Ms. Merrifield serves as the Chairperson of the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee has the authority to consult with outside advisors or retain search firms to assist in the search for qualified candidates, or consider director candidates recommended by our stockholders.

The Nominating and Corporate Governance Committee met three (3) times in 2023.

EXECUTIVE AND DIRECTOR COMPENSATION

This section discusses the material components of the executive compensation program for our executive officers who are named in the “2023 Summary Compensation Table” below. In 2023, our “named executive officers” and their positions were as follows:

- Maria Palasis, Ph.D., President and Chief Executive Officer;
- Harlan W. Waksal, M.D., Executive Chair and Chairperson of the Board; and
- John Bishop, Ph.D., Chief Technology Officer

2023 Summary Compensation Table

The following table sets forth information concerning the compensation of our named executive officers for the years shown.

<u>Name and Principal Position</u>	<u>Year</u>	<u>Salary (\$)</u>	<u>Bonus ⁽¹⁾ (\$)</u>	<u>Option Awards⁽²⁾ (\$)</u>	<u>Non-Equity Incentive Plan Compensation⁽³⁾ (\$)</u>	<u>All Other ⁽⁴⁾ Compensation (\$)</u>	<u>Total (\$)</u>
Maria Palasis, Ph.D.	2023	583,000		842,675	349,800	9,900	1,785,375
<i>President and Chief Executive Officer</i>	2022	583,000		870,601	273,000	9,150	1,735,751
Harlan W. Waksal, M.D.	2023	200,000		415,003	—	10,060	625,063
<i>Executive Chairman</i>	2022	175,385		4,839,974	—	12,016	5,027,375
John Bishop, Ph.D.(5)	2023	385,000	68,000	367,515	200,000	9,900	1,030,415
<i>Chief Technology Officer</i>							

- (1) The amount represents a sign-on bonus in connection with Dr. Bishop’s commencement of employment.
- (2) Amounts represent the full grant date fair value of stock options granted during 2023 computed in accordance with ASC Topic 718, rather than the amounts paid to or realized by the named individual. We provide information regarding the assumptions used to calculate the value of all option awards made to named executive officers in Note 9 to the consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2023.
- (3) Amounts represent performance-based annual cash bonuses determined by our board of directors for the named executive officers for fiscal year 2023. Dr. Bishop’s annual cash bonus was pro-rated to reflect his partial year of employment with us.
- (4) Amounts for fiscal year 2023 represent company 401(k) matching contributions, and in the case of Dr. Waksal, travel expenses and related tax gross-ups.
- (5) Dr. Bishop commenced employment with us effective February 27, 2023.

Narrative to Summary Compensation Table

2023 Salaries

The named executive officers receive a base salary to provide a fixed component of compensation reflecting the executive’s skill set, experience, role and responsibilities. For 2023, the base salaries for Dr. Palasis, Dr. Waksal and Dr. Bishop were \$583,000, \$200,000 and \$455,000, respectively. Dr. Bishop’s salary shown in the 2023 Summary Compensation Table above reflects a partial year of employment.

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2023 Bonuses

For 2023, we offered Dr. Palasis and Dr. Bishop the opportunity to earn annual cash bonuses to compensate them for attaining short-term company goals as approved by our board of directors. Consistent with his employment agreement, Dr. Waksal is not eligible for an annual bonus unless our board of directors otherwise determines. For 2023, bonuses were based entirely on attaining clinical, regulatory, research and development, strategic and financial goals. The 2023 target bonuses for each of Dr. Palasis and Dr. Bishop were 55% and 40%, respectively, of his or her annual base salary earned for the year based on each individual's commencement date. Each individual's respective target bonuses was set by the board of directors. The actual annual cash bonuses awarded to Dr. Palasis and Dr. Bishop for 2023 performance are set forth above in the 2023 Summary Compensation Table in the column titled "Non-Equity Incentive Plan Compensation."

Equity Compensation

We offer stock options to our employees, including our named executive officers, as the long-term incentive component of our compensation program. Our stock options generally allow employees to purchase shares of our common stock at a price equal to the fair market value of our common stock on the date of grant. With respect to grants made in connection with the commencement of employment, our stock options typically vest as to 25% of the underlying shares on the first anniversary of the vesting commencement date and in equal monthly installments over the following three years, subject to the holder's continued service with us. From time to time, our board of directors may also construct alternate vesting schedules as it determines are appropriate to motivate particular employees. Historically, our stock options have been intended to qualify as "incentive stock options" to the extent permitted under the Internal Revenue Code.

The following table sets forth the stock options granted to our named executive officers in 2023.

<u>Named Executive Officer</u>	<u>2023 Stock Options Granted</u>
Maria Palasis, Ph.D.	400,000
Harlan W. Waksal, M.D.	200,000
John Bishop, Ph.D.	220,000

In connection with our annual performance review in January 2023, Dr. Palasis was granted an option to purchase 250,000 shares of our common stock and Dr. Waksal was granted an option to purchase 200,000 shares of our common stock. In June 2023, Dr. Palasis was granted an option to purchase 150,000 shares of our common stock in connection with the achievement of a certain corporate goal. These options vest in 48 equal monthly installments following the vesting commencement date, subject to such individual's continued service to the Company on each applicable vesting date.

The option award to Dr. Bishop was made in connection with the commencement of his employment with us and is subject to our standard time-based vesting schedule for grants made in connection with the commencement of employment.

Other Elements of Compensation

Retirement Plan

We maintain a 401(k) retirement savings plan for our employees, including our named executive officers, who satisfy certain eligibility requirements. Our named executive officers are eligible to participate in the 401(k) plan on the same terms as other full-time employees. We believe that providing a vehicle for tax-deferred retirement savings through our 401(k) plan adds to the overall desirability of our executive compensation package and further incentivizes our employees, including our named executive officers, in accordance with our compensation policies. For 2023, we made matching contributions of 50% of the first 6% of eligible compensation contributed under our 401(k) plan.

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Employee Benefits and Perquisites

All of our full-time employees, including our named executive officers, are eligible to participate in our employee benefit plans and programs, including medical, dental, and vision benefits, health spending accounts, and short-and long-term disability, accidental death and dismemberment, and life insurance, to the same extent as our other full-time employees, subject to the terms and eligibility requirements of those plans.

Outstanding Equity Awards at 2023 Fiscal Year-End

The following table summarizes the number of shares of common stock underlying outstanding equity incentive plan awards for each named executive officer as of December 31, 2023.

Name	Vesting Commencement Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date
Maria Palasis, Ph.D.	1/1/2015	94,287	—	—	22.76	9/23/2025
	6/13/2017	31,429	—	31,429 ⁽²⁾	1.73	6/13/2027
	3/6/2019	170,455	—	—	2.76	3/6/2029
	4/30/2020	299,111	27,192 ⁽¹⁾	—	16.00	4/29/2030
	2/8/2021	85,000	35,000 ⁽¹⁾	—	10.63	2/7/2031
	2/12/2022	58,391	69,009 ⁽¹⁾	—	4.78	2/11/2032
	2/16/2022	—	—	175,000 ⁽⁴⁾	4.21	2/15/2032
Harlan W. Waksal, M.D.	1/31/2023	57,291	192,709 ⁽¹⁾	—	2.85	1/31/2033
	6/15/2023	18,750	131,250 ⁽¹⁾	—	2.99	6/14/2033
	2/16/2022	—	—	520,000 ⁽⁴⁾	4.21	2/15/2032
John Bishop, Ph.D.	6/16/2022	—	—	953,002 ⁽⁴⁾	5.09	6/15/2032
	1/31/2023	45,833	154,167	—	2.85	1/31/2033
	2/27/2023	—	220,000 ⁽³⁾	—	2.31	2/26/2033

- (1) Options vest and become exercisable in equal monthly installments over four years following the vesting commencement date, subject to the named executive officer's continued service with us on each applicable vesting date.
- (2) Options were eligible to vest and become exercisable at the end of any given three-month period occurring prior to six years from the vesting commencement date in which we recognize revenue from the commercial sale of an FDA-approved product each month and in amounts, with respect to the second and third months of such period that increase from the revenue recognized from such product sales in the immediately preceding month, subject to Dr. Palasis' continued employment with us on each applicable vesting date. Such milestone was not achieved during the six-year performance period; however, the options remain eligible to vest, in full or in part, in the event of certain terminations of Dr. Palasis' employment with us or upon a change in control transaction.
- (3) Options vest and become exercisable as to 25% of the underlying shares on the first anniversary of the vesting commencement date and in 36 equal monthly installments over the following three years, subject to the named executive officer's continued service with us on each applicable vesting date.
- (4) Options vest and become exercisable as to one-third of the shares underlying the option, in each case, upon the achievement of three distinct market capitalization targets during the five-year performance period following the date of grant, provided that no more than one-third of the option may vest prior to the first anniversary of the date of grant, no more than two-thirds of the option may vest prior to the second anniversary of the date of grant and the option may not become fully vested prior to the third anniversary of the date of grant, subject to the named executive officer's continued service on each applicable vesting date.

Executive Employment Agreements

We have entered into employment agreements with each of our named executive officers. The employment agreements provide for the annual base salaries, and annual target bonus opportunities, as applicable described above under the headings “2023 Salaries” and “2023 Bonuses.”

Each of our named executive officers is also entitled to reimbursement of reasonable travel and other business expenses incurred in the performance of such individual’s duties to the Company in accordance with the Company’s expense reimbursement policy.

The employment agreements with Dr. Waksal and Dr. Bishop provide for an initial option award in connection with the commencement of their respective employment. Dr. Waksal was also promised an anti-dilutive option in an amount equal to the difference between the shares subject to the initial option and four percent of our “capitalization” (as defined in his employment agreement) immediately following our first bona fide equity financing following February 16, 2022. The anti-dilutive option was granted on June 16, 2022 and is subject to the same vesting terms as the initial option.

Additionally, Dr. Palasis and Dr. Waksal are each entitled to receive a cash bonus upon a change in control transaction in which our market capitalization equals or exceeds \$750,000,000 (each, a “Transaction Bonus”), in an amount equal to 1.0% of our market capitalization at the time of the change in control transaction, subject to the named executive officer’s continued service through the completion of the change in control transaction and execution of a release of claims.

Under the employment agreements, if we terminate the employment of Dr. Palasis, Dr. Waksal or Dr. Bishop without “cause” or the executive resigns for “good reason” (each as defined below), subject to the executive’s timely execution of a release of claims and continued compliance with a separate restrictive covenant agreement (described below), the executive is entitled to receive (i) base salary continuation for a period of 12 months for Dr. Palasis and Dr. Waksal, and 9 months for Dr. Bishop; (ii) in the case of Dr. Palasis and Dr. Bishop payment of any annual bonus for the prior year earned but unpaid as of the date of termination (iii) direct payment of or reimbursement for continued medical, dental or vision coverage pursuant to COBRA for up to 12 months for Dr. Palasis and Dr. Waksal, and 9 months for Dr. Bishop, less the amount each named executive officer would have had to pay to receive such coverage as an active employee based on the cost sharing levels in effect on the named executive officer’s termination date, and (iv) in the case of Dr. Palasis and Dr. Waksal, any vested and exercisable options will remain outstanding and exercisable for 15 months or 12 months, respectively, following termination.

If we terminate Dr. Palasis, Dr. Waksal, or Dr. Bishop without “cause” or the executive resigns for “good reason,” in either case, on or within three months prior to or 12 months following a change in control, then, in lieu of the severance benefits described above, subject to the executive’s timely execution of a release of claims, the executive is entitled to receive (i) an amount equal in cash equal to 1.5 times for Dr. Palasis and Dr. Waksal, and 1.0 times for Dr. Bishop the sum of the named executive officer’s annual base salary plus target annual bonus for the year of termination, (ii) in the case of Dr. Palasis and Dr. Bishop, payment of any annual bonus for the prior year earned but unpaid as of the date of termination, (iii) direct payment of or reimbursement for continued medical, dental or vision coverage pursuant to COBRA for up to 18 months for Dr. Palasis and Dr. Waksal and 12 months for Dr. Bishop, less the amount each named executive officer would have had to pay to receive such coverage as an active employee based on the cost sharing levels in effect on the named executive officer’s termination date, (iv) accelerated vesting of all unvested equity or equity-based awards held by the named executive officer that vest solely based on the passage of time, with any such awards that vest based on the attainment of performance-vesting conditions being governed by the terms of the applicable award agreement, (v) in the case of Dr. Palasis and Dr. Waksal, any vested and exercisable options will remain outstanding and exercisable for 15 months or 12 months, respectively, following termination, and (vi) in the case of Dr. Palasis and Dr. Waksal, payment of the Transaction Bonus, provided that the conditions for payment are otherwise satisfied.

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Each of our named executive officers has agreed to refrain from competing with us while employed and following his or her termination of employment for any reason for a period of one year and to refrain from soliciting our employees or customers while employed and following his or her termination of employment for any reason for a period of two years in the case of Dr. Palasis and one year in the case of Dr. Waksal and Dr. Bishop.

For purposes of the employment agreements, “cause” generally means the named executive officer’s refusal to substantially perform the duties associated with his or her position with our Company or to carry out the reasonable and lawful instructions of our board of directors concerning duties or actions consistent with his or her position, his or her breach of a material provision of the employment agreement which remains uncured (to the extent capable of cure) for a period of 30 days following written notice from our Company, his or her conviction, plea of no contest or nolo contendere or imposition of unadjudicated probation for any felony or crime involving moral turpitude, his or her unlawful use (including being under the influence) or possession of illegal drugs on our premises or while performing his or her duties and responsibilities under the employment agreement, or his or her commission of any act of fraud, embezzlement, misappropriation, willful misconduct, or breach of fiduciary duty against us.

For purposes of the employment agreements, “good reason” generally means, subject to certain cure rights, the named executive officer’s termination of employment due to a reduction in salary or target bonus (other than a reduction of 20% or less of the named executive officer’s base salary implemented as part of an across the board, proportionate reduction of base salaries for other members of our management team), a material decrease in authority or areas of responsibility, our Company’s breach of any one or more of the material provisions of the employment agreement, or a relocation by our Company of the named executive officer’s primary office to a location more than 50 miles from the named executive officer’s primary office on the date of the agreement.

Director Compensation

2023 Director Compensation Table

<u>Name</u>	<u>Fees Earned or Paid in Cash</u> <u>(\$)</u>	<u>Option Awards</u> <u>(\$)⁽¹⁾</u>	<u>Total</u> <u>(\$)</u>
Michael Altman	40,000	59,813	99,813
C. Ann Merrifield	53,250	59,813	113,063
Edward Anderson	47,500	59,813	107,313
W. Bradford Smith	64,000	59,813	123,813
James Tobin	92,500	59,813	152,313
Konstantin Poukalov	40,000	59,813	99,813
Nancy Snyderman, M.D.	49,250	59,813	109,063

- (1) Amounts reflect the full grant-date fair value of stock awards and stock options granted during 2023 computed in accordance with ASC Topic 718, rather than the amounts paid to or realized by the named individual. We provide information regarding the assumptions used to calculate the value of all stock awards and option awards made to our directors in Note 9 to the consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2023.

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The table below shows the aggregate numbers of option awards (exercisable and unexercisable) held as of December 31, 2023 by each non-employee director. None of our non-employee directors held unvested stock awards as of December 31, 2023.

<u>Name</u>	<u>Options Outstanding at Fiscal Year End</u>
Michael Altman	49,000
C. Ann Merrifield	47,788
Edward Anderson	49,000
W. Bradford Smith	47,789
Konstantin Poukalov	49,000
James Tobin	34,500
Nancy Snyderman, M.D.	49,000

Non-Employee Director Compensation Program

Compensation received by our non-employee directors for their services on our board of directors under our non-employee director compensation program consisted of the following amounts for fiscal year 2023:

- Upon the director's initial election or appointment to our board of directors, an option to purchase 40,000 shares of our common stock;
- If the director has served on our board of directors for at least six months as of the date of an annual meeting of stockholders and will continue to serve as a director immediately following such meeting, an option to purchase 20,000 shares of our common stock on the date of the annual meeting;
- An annual director fee of \$40,000;
- If the director serves as lead independent director or chair or on a committee of our board of directors, an additional annual fee as follows:
- Chair of the board or lead independent director: \$30,000;
- Chair of the audit committee: \$20,000;
- Audit committee member other than the chair, \$7,500;
- Chair of the compensation committee, \$15,000;
- Compensation committee member other than the chair, \$5,250;
- Chair of the nominating and corporate governance committee, \$8,000; and
- Nominating and corporate governance committee member other than the chair, \$4,000.

In December 2023, upon the recommendation of the Compensation Committee following a competitive market review by Pay Governance, the Compensation Committee's independent compensation consultant, the Board approved the following changes to our non-employee director compensation program, effective January 1, 2024:

- With respect to the option award granted upon the director's initial election or appointment to our board of directors, increased the shares of our common stock subject to the option from 40,000 to 60,000 shares;
- With respect to the option awarded annually for a director who has served on our board of directors for at least six months as of the date of an annual meeting of stockholders and will continue to serve as a director immediately following such meeting, increased the shares of our common stock subject to the option from 20,000 to 30,000 shares;
- The additional annual fee paid to the chair of the nominating and corporate governance committee was increased from \$8,000 to \$10,000;
- The additional annual fee paid to members of the audit committee (other than the chair) was increased from \$7,500 to \$10,000;

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- The additional annual fee paid to members of the compensation committee (other than the chair) was increased from \$5,250 to \$7,500; and
- The additional annual fee paid to members of the nominating and corporate governance committee (other than the chair) was increased from \$4,000 to \$5,000.

Director fees under the program are payable in arrears in four equal quarterly installments not later than the fifteenth day following the final day of each calendar quarter, provided that the amount of each payment is prorated for any portion of a quarter that a director is not serving on our board of directors and no fee was payable in respect of any period prior to the effective date of the registration statement relating to our initial public offering.

Stock options granted to our non-employee directors under the program have an exercise price equal to the fair market value of our common stock on the date of grant and expire not later than ten years after the date of grant. The stock options granted upon a director's initial election or appointment vest in 36 substantially equal monthly installments following the date of grant. The stock options granted annually to directors vest in a single installment on the earlier of the day before the next annual meeting or the first anniversary of the date of grant. In addition, all unvested stock options vest in full upon the occurrence of a change in control.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock by (i) each person or group of affiliated persons known by us to beneficially own more than 5% of our common stock, (ii) each of our named executive officers, (iii) each of our directors and (iv) all of our current executive officers and directors as a group as of April 3, 2024, unless otherwise indicated.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. Applicable percentage ownership is based on 60,964,859 shares of common stock outstanding as of April 3, 2024. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options and warrants held by such person that are currently exercisable or will become exercisable within 60 days of April 3, 2024 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless noted otherwise, the address of all listed stockholders is 480 Arsenal Way, Watertown, MA 02472. Each of the stockholders listed below has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

<u>Name of Beneficial Owner</u>	<u>Shares of Common Stock Beneficially Owned</u>	<u>Percentage</u>
5% or Greater Stockholders		
Entities Affiliated with Perceptive Advisors, LLC ⁽¹⁾	12,757,563	20.93%
Entities Affiliated with North Bridge Venture Partners ⁽²⁾	5,888,416	9.66%
Entities Affiliated with Venrock ⁽³⁾	5,553,552	9.11%
Nantahala Capital Partners and affiliates ⁽⁴⁾	4,752,324	7.80%
Entities Affiliated with Citadel ⁽⁵⁾	4,286,927	7.03%
Named Executive Officers and Directors		
Maria Palasis, Ph.D. ⁽⁶⁾	1,057,659	1.71%
Harlan W. Waksal, M.D. ⁽⁷⁾	1,310,632	2.11%
Richard Nieman, M.D. ⁽⁸⁾	140,594*	%
Michael Altman (Perceptive) ⁽¹⁾	29,000*	%
C. Ann Merrifield ⁽⁹⁾	39,116*	%
Konstantin Poukalov (Perceptive) ⁽¹⁾	29,000*	%
W. Bradford Smith ⁽¹⁰⁾	27,789*	%
Nancy L. Snyderman, M.D. ⁽¹¹⁾	30,025*	%
James R. Tobin ⁽¹²⁾	10,472*	%
All current executive officers and directors as a group ^(11 Persons) ⁽¹³⁾	2,901,145	4.69%

* Less than 1% ownership as of April 3, 2024.

- (1) Pursuant to a Schedule 13D/A filed with the SEC on February 14, 2024, Perceptive Life Sciences Master Fund, Ltd. (“Perceptive Life”) reported shared voting power and shared dispositive power over 11,469,117 shares of common stock; Perceptive LS (A), LLC (“Perceptive LS”) reported shared voting power and shared dispositive power over 1,288,446 shares of common stock; Joseph Edelman reported shared voting power and shared dispositive power over 12,757,563 shares of common stock; and Perceptive Advisors LLC reported shared voting power and shared dispositive power over 12,757,563 shares of common stock. Perceptive Advisors LLC serves as the investment advisor to Perceptive Life. Perceptive LS GP, LLC is the manager of Perceptive LS. Joseph Edelman is the managing member of Perceptive Advisors LLC and the sole member of Perceptive LS GP, LLC. Michael Altman and

Konstantin Poukalov, two of our directors, are Managing Directors at Perceptive Advisors LLC. Messrs. Altman and Poukalov each have sole voting power and sole dispositive power over 29,000 shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024. The address of the aforementioned individuals and entities is c/o Perceptive Advisors, LLC, 51 Astor Place, 10th Floor, New York, New York 10003.

- (2) Pursuant to a Schedule 13D/A filed with the SEC on June 9, 2023, North Bridge Venture Partners V-A, L.P. (“NBVP V-A”) reported shared voting power and shared dispositive power over 2,259,301 shares of common stock; North Bridge Venture Partners V-B, L.P. (“NBVP V-B”) reported shared voting power and shared dispositive power over 1,107,370 shares of common stock; and North Bridge Venture Partners VI, L.P. (“NBVP VI”) reported shared voting power and shared dispositive power over 2,521,745 shares of common stock. North Bridge Venture Management V, L.P. (“NBVM V”), is the sole General Partner of NBVP V-A and NBVP V-B and may be deemed to have voting and dispositive power with respect to the shares held by those entities. NBVM GP, LLC, the General Partner of NBVM V, may be deemed to have voting and dispositive power over the shares held of record by NBVP VA and NBVP V-B. Shared voting and dispositive power of such shares are vested in Edward T. Anderson and Richard A. D’Amore. North Bridge Venture Management VI, L.P. (“NBVM VI”) is the sole General Partner of NBVP VI. NBVM GP, LLC, the General Partner of NBVM VI, and may be deemed to have voting and dispositive power over the shares held of record by NBVP VI. Shared voting and dispositive power of such shares are vested in Edward T. Anderson and Richard A. D’Amore. Mr. Anderson, a manager of NBVM GP, LLC, disclaims beneficial ownership over such shares, except to the extent of his pecuniary interest therein. The address of all entities affiliated with North Bridge Venture Partners is 150 A Street, Suite 102 Needham, MA 02492.
- (3) Pursuant to a Schedule 13G/A filed with the SEC on February 14, 2024, (i) Venrock Healthcare Capital Partners II, L.P. reported shared voting power and shared dispositive power over 414,413 shares and 230,486 shares issuable upon the exercise of immediately exercisable warrants (“Warrants”); (ii) VHCP Co-Investment Holdings II, LLC reported shared voting and shared dispositive power over 167,929 shares and 93,397 shares issuable upon the exercise of Warrants; (iii) Venrock Healthcare Capital Partners III, L.P. reported shared voting and shared dispositive power over 895,791 shares and 904,524 shares issuable upon the exercise of Warrants; (iv) VHCP Co-Investment Holdings III, LLC reported shared voting power and shared dispositive power over 89,631 shares and 90,496 shares issuable upon the exercise of Warrants; and (v) Venrock Healthcare Capital Partners EG, L.P. reported shared voting power and shared dispositive power over 1,007,829 shares and 1,659,056 shares issuable upon the exercise of Warrants. The share numbers in the preceding sentence represent the maximum number of shares of common stock issuable upon exercise of the Warrants held by the Reporting Persons as a result of the beneficial ownership provision described in the following sentence. Under the terms of the Warrants, the Company may not effect the exercise of any such Warrant, and a holder will not be entitled to exercise any portion of such Warrant, if, upon giving effect to such exercise, the aggregate number of shares of common stock beneficially owned by the holder (together with its affiliates and other attribution parties) would exceed 9.999% of the number of shares of common stock outstanding immediately after giving effect to the exercise. Accordingly, notwithstanding the number of shares of common stock listed above as being beneficially owned by the entities affiliated with Venrock, the entities affiliated with Venrock disclaim beneficial ownership of the shares of common stock issuable upon exercise of the Warrants to the extent the number of shares of common stock beneficially owned by each entity affiliated with Venrock and any other person or entities with which such entity’s beneficial ownership would be aggregated for purposes of Section 13(d) of the Exchange Act would exceed 9.999% of the total number of shares of common stock outstanding. VHCP Management II, LLC is the general partner of Venrock Healthcare Capital Partners II, L.P. and the manager of VHCP Co-Investment Holdings II, LLC. VHCP Management III, LLC is the general partner of Venrock Healthcare Capital Partners III, L.P. and the manager of VHCP Co-Investment Holdings III, LLC. VHCP Management EG, LLC is the general partner of Venrock Healthcare Capital Partners EG, L.P. Mr. Nimish Shah and Mr. Bong Koh are the voting members of VHCP Management

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- II, LLC, VHCP Management III, LLC and VHCP Management EG, LLC. The address of the aforementioned individuals and entities is 7 Bryant Park 23rd Floor, New York, NY 10018.
- (4) Pursuant to a Schedule 13G/A filed with the SEC on February 14, 2024, Nantahala Capital Management, LLC (“Nantahala”) may be deemed to be the beneficial owner of 4,752,324 shares held by funds and separately managed accounts under its control, and as the managing members of Nantahala, each of Wilmot B. Harkey and Daniel Mack may be deemed to be a beneficial owner of those shares. The 4,752,324 shares includes 702,106 shares which may be acquired upon the exercise of warrants. The address of Nantahala and its affiliates is 130 Main Street, 2nd Floor, New Canaan, CT 06840.
 - (5) Pursuant to a Schedule 13G filed with the SEC on February 14, 2024, consists of (i) 4,272,816 shares of common stock held by each of Citadel Advisors LLC, Citadel Advisors Holdings LP and Citadel GP LLC with shared voting power and shared dispositive power and (ii) 14,111 shares of common stock held by each of Citadel Securities Group LP and Citadel Securities GP LLC with shared voting power and shared dispositive power. Kenneth Griffin reported shared voting power and shared dispositive power over 4,286,927 shares of common stock. Citadel Advisors LLC is the portfolio manager for Citadel CEMF Investments Ltd. Citadel Advisors Holdings LP is the sole member of Citadel Advisors LLC. Citadel GP LLC is the general partner of Citadel Advisors Holdings LP. Citadel Securities Group LP is the non-member manager of Citadel Securities LLC. Citadel Securities GP LLC is the general partner of Citadel Securities Group LP. Kenneth Griffin is the President and Chief Executive Officer of Citadel GP LLC, and owns a controlling interest in Citadel GP LLC and Citadel Securities GP LLC. The address of the aforementioned individual and entities is 200 S. Biscayne Blvd., Suite 3300, Miami, Florida 33131.
 - (6) Consists of options to purchase 1,057,659 shares of common stock that are or will be immediately exercisable within 60 days April 3, 2024.
 - (7) Consists of 261,966 shares of common stock and 1,048,666 options to purchase shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.
 - (8) Consists of options to purchase 140,594 shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.
 - (9) Consists of 11,328 shares of common stock and 27,788 options to purchase shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.
 - (10) Consists of options to purchase 27,789 shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.
 - (11) Consists of 1,025 shares of common stock and 29,000 options to purchase shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.
 - (12) Consists of options to purchase 10,472 shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.
 - (13) Consists of 274,319 shares of common stock and 2,626,826 options to purchase shares of common stock that are or will be immediately exercisable within 60 days of April 3, 2024.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Policies and Procedures for Related Person Transactions

Our Board recognizes the fact that transactions with related persons present a heightened risk of conflicts of interests (or the perception thereof) and has adopted a written related person transactions policy to comply with Section 404 of the Exchange Act. Under the policy, our finance team is primarily responsible for developing and implementing processes and procedures to obtain information regarding related persons with respect to potential related person transactions and then determining, based on the facts and circumstances, whether such potential related person transactions do, in fact, constitute related person transactions requiring compliance with the policy. In addition, any potential related person transaction that is proposed to be entered into by the Company must be reported to the Company's Chief Financial Officer, by both the related person and the person at the Company responsible for such potential related person transaction.

If our finance team determines that a transaction or relationship is a related person transaction requiring compliance with the policy, our Chief Financial Officer is required to present to the Audit Committee all relevant facts and circumstances relating to the related person transaction. Our Audit Committee must review the relevant facts and circumstances of each related person transaction, including if the transaction is on terms comparable to those that could be obtained in arm's length dealings with an unrelated third party and the extent of the related person's interest in the transaction, take into account the conflicts of interest and corporate opportunity provisions of our Code of Business Conduct and Ethics, and either approve or disapprove the related person transaction. If advance Audit Committee approval of a related person transaction requiring the Audit Committee's approval is not feasible, then the transaction may be preliminarily entered into by management upon prior approval of the transaction by the chair of the Audit Committee subject to ratification of the transaction by the Audit Committee at the Audit Committee's next regularly scheduled meeting; provided, that if ratification is not forthcoming, management will make all reasonable efforts to cancel or annul the transaction. If a transaction was not initially recognized as a related person transaction, then upon such recognition the transaction will be presented to the Audit Committee for ratification at the Audit Committee's next regularly scheduled meeting; provided, that if ratification is not forthcoming, management will make all reasonable efforts to cancel or annul the transaction.

Our management will update the Audit Committee as to any material changes to any approved or ratified related person transaction and will provide a status report at least annually of all then current related person transactions. No director may participate in the approval of a related person transaction for which he or she is a related person.

The following are certain transactions, arrangements and relationships with our directors, executive officers and stockholders owning 5% or more of our outstanding common stock, or any member of the immediate family of any of the foregoing persons, since January 1, 2022.

LianBio License Agreement

Entities affiliated with Perceptive Advisors, LLC are shareholders of both us and LianBio. Additionally, Konstantin Poukalov and Michael Altman are each a Managing Director at Perceptive Advisors, LLC and Mr. Poukalov is also the Executive Chairman of LianBio's board of directors.

Private Placement

On May 25, 2023, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with the purchasers named therein (the "Investors"), including Perceptive Advisors, LLC and, North Bridge Venture Partners, which are 5% or greater holders of our common stock and entities with which certain of our directors are related, pursuant to which we agreed to sell securities to the Investors in a private placement (the "Private Placement"). The Purchase Agreement provided for the sale and issuance by us of: (i) an aggregate of 17,652,962

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shares of our common stock, and pre-funded warrants to purchase up to 2,408,188 shares of common stock, with an exercise price of \$0.001 per share, and (ii) accompanying warrants to purchase up to 10,030,575 shares of common stock, with an exercise price of \$2.673 per share, for aggregate gross proceeds of approximately \$50.0 million, before deducting private placement expenses.

Investor Rights Agreement

On April 7, 2022, we entered into a Ninth Amended and Restated Investor Rights Agreement (“Investor Rights Agreement”) with the holders of our then-outstanding preferred stock, including Perceptive Advisers, LLC and, North Bridge Venture Partners, which are 5% or greater holders of our common stock and entities with which certain of our directors are related. The agreement provides for certain rights relating to the registration of such holders’ common stock. On May 25, 2023, in connection with the Purchase Agreement, the Company entered into an Amendment No. 1 to the Ninth Amended and Restated Investor Rights Agreement (“Amendment No. 1”) with certain Investors affiliated with Perceptive Advisors and North Bridge Venture Partners (the “IRA Covered Investors”). Pursuant to Amendment No. 1, the definition of “Registrable Shares” in the Investor Rights Agreement was amended to include all shares of common stock purchased by the IRA Covered Investors in the Private Placement.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director (and in certain cases their related venture capital funds) and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys’ fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person’s services as a director or executive officer.

DELINQUENT SECTION 16(a) REPORTS

Section 16(a) of the Exchange Act requires our executive officers, directors, and persons who beneficially own more than 10% of our common stock to file with the SEC reports of their ownership and changes in their ownership of our common stock. To our knowledge, based solely on review of the copies of such reports and amendments to such reports with respect to the year ended December 31, 2023 filed with the SEC and on written representations by our directors and executive officers, all required Section 16 reports under the Exchange Act for our directors, executive officers, principal accounting officer and beneficial owners of greater than 10% of our common stock were filed on a timely basis during the year ended December 31, 2023 other than one late Form 4 reporting one transaction for Dr. Palasis.

STOCKHOLDERS' PROPOSALS

Stockholders who intend to have a proposal considered for inclusion in our proxy materials for presentation at our 2025 Annual Meeting of Stockholders pursuant to Rule 14a-8 under the Exchange Act must submit the proposal to our Secretary at our offices at 480 Arsenal Way, Watertown, Massachusetts 02472 in writing not later than [●].

Stockholders intending to present a proposal at the 2025 Annual Meeting of Stockholders, but not to include the proposal in our proxy statement, or to nominate a person for election as a director, must comply with the requirements set forth in our Amended and Restated Bylaws. Our Amended and Restated Bylaws require, among other things, that our Secretary receive written notice from the stockholder of record of their intent to present such proposal or nomination not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting. Therefore, we must receive notice of such a proposal or nomination for the 2025 Annual Meeting of Stockholders no earlier than February 13, 2025 and no later than March 15, 2025. The notice must contain the information required by the Amended and Restated Bylaws, a copy of which is available upon request to our Secretary. In the event that the date of the 2025 Annual Meeting of Stockholders is more than 30 days before or more than 60 days after June 13, 2025, then our Secretary must receive such written notice not earlier than the close of business on the 120th day prior to the 2025 Annual Meeting and not later than the close of business on the 90th day prior to the 2025 Annual Meeting or, if later, the close of business on the 10th day following the day on which public disclosure of the date of such meeting is first made by us.

In addition to satisfying the foregoing requirements under our Amended and Restated Bylaws, to comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than the Company's nominees must provide notice that sets forth the information required by Rule 14a-19(b) under the Exchange Act.

We reserve the right to reject, rule out of order, or take other appropriate action with respect to any proposal that does not comply with these or other applicable requirements.

OTHER MATTERS

Our Board is not aware of any matter to be presented for action at the Annual Meeting other than the matters referred to above and does not intend to bring any other matters before the Annual Meeting. However, if other matters should come before the Annual Meeting, it is intended that holders of the proxies named on the Company's proxy card will vote thereon in their discretion.

SOLICITATION OF PROXIES

The accompanying proxy is solicited by and on behalf of our Board, whose Notice of Annual Meeting is attached to this proxy statement, and the entire cost of our solicitation will be borne by us. In addition to the use of mail, proxies may be solicited by personal interview, telephone, e-mail and facsimile by our directors, officers and other employees who will not be specially compensated for these services. We will also request that brokers, nominees, custodians and other fiduciaries forward soliciting materials to the beneficial owners of shares held by the brokers, nominees, custodians and other fiduciaries. We will reimburse these persons for their reasonable expenses in connection with these activities.

Certain information contained in this proxy statement relating to the occupations and security holdings of our directors and officers is based upon information received from the individual directors and officers.

Stockholders may obtain our proxy statement (and any amendments and supplements thereto) and other documents as and when filed by us with the SEC without charge from the SEC's website at: www.sec.gov.

LYRA'S ANNUAL REPORT ON FORM 10-K

A copy of Lyra's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, including financial statements and schedules thereto but not including exhibits, as filed with the SEC, will be sent to any stockholder of record as of April 16, 2024 without charge upon written request addressed to:

Lyra Therapeutics, Inc. Attention: Secretary 480 Arsenal Way Watertown, Massachusetts 02472

A reasonable fee will be charged for copies of exhibits. You also may access this proxy statement and our Annual Report on Form 10-K at www.proxyvote.com. You also may access our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 at www.lyratx.com.

WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING ONLINE, WE URGE YOU TO VOTE YOUR SHARES VIA THE TOLL-FREE TELEPHONE NUMBER OR OVER THE INTERNET, AS DESCRIBED IN THIS PROXY STATEMENT. IF YOU RECEIVED A COPY OF THE PROXY CARD BY MAIL, YOU MAY SIGN, DATE AND MAIL THE PROXY CARD IN THE ENCLOSED RETURN ENVELOPE. PROMPTLY VOTING YOUR SHARES WILL ENSURE THE PRESENCE OF A QUORUM AT THE ANNUAL MEETING AND WILL SAVE US THE EXPENSE OF FURTHER SOLICITATION.

By Order of the Board of Directors,

[•]

Jason Cavalier
Chief Financial Officer and Treasurer
Watertown, Massachusetts
April [•], 2024

ANNEX A-1

AMENDMENT TO THE RESTATED CERTIFICATE OF INCORPORATION

SEVENTH: Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors or officers for breaches of fiduciary duty, no director or officer of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director or officer, as applicable, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director or officer of the Corporation for or with respect to any acts or omissions of such director or officer occurring prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to permit further elimination or limitation of the personal liability of directors or officers, then the liability of a director or officer of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware as so amended.

ANNEX A-2

AMENDMENT TO THE RESTATED CERTIFICATE OF INCORPORATION

(Marked to Show Changes)

SEVENTH: Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors **or officers** for breaches of fiduciary duty, no director **or officer** of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director **or officer, as applicable**, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director **or officer** of the Corporation for or with respect to any acts or omissions of such director **or officer** occurring prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to permit further elimination or limitation of the personal liability of directors **or officers**, then the liability of a director **or officer** of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware as so amended.



LYRA THERAPEUTICS, INC.
480 ARSENAL WAY
WATERTOWN, MASSACHUSETTS 02472



VOTE BY INTERNET

Before 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 up until 11:59 PM Eastern Daylight Time on June 12, 2024. 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/LYRA2024

You may attend the meeting via the Internet and vote during the meeting. We recommend, however, that you vote before the meeting even if you plan to participate in the meeting, since you can change your vote during the meeting by voting when the polls are open. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 PM Eastern Daylight Time on June 12, 2024. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

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

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

V44091-POB466

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

LYRA THERAPEUTICS, INC. The Board of Directors recommends you vote FOR the following proposal:		<table style="margin: auto;"> <tr> <td style="padding: 0 5px;">For All</td> <td style="padding: 0 5px;">Withhold All</td> <td style="padding: 0 5px;">For All Except</td> </tr> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> </tr> </table>	For All	Withhold All	For All Except	○	○	○	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.
For All	Withhold All	For All Except							
○	○	○							
1. Election of Class I Directors to serve until the 2027 Annual Meeting of Stockholders, and until their respective successors shall have been duly elected and qualified.									
Nominees: 01) Konstantin Poukalov 02) Nancy L. Snyderman, M.D.									
The Board of Directors recommends you vote FOR the following proposals:		<table style="margin: auto;"> <tr> <td style="padding: 0 5px;">For</td> <td style="padding: 0 5px;">Against</td> <td style="padding: 0 5px;">Abstain</td> </tr> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> </tr> </table>		For	Against	Abstain	○	○	○
For	Against	Abstain							
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2. To ratify the appointment of BDO USA, P.C. as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2024.		<table style="margin: auto;"> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> </tr> </table>		○	○	○			
○	○	○							
3. To approve an amendment to the Company's Certificate of Incorporation to provide for the exculpation of officers from breaches of fiduciary duty to the fullest extent permitted by the General Corporation Law of the State of Delaware.		<table style="margin: auto;"> <tr> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> <td style="text-align: center;">○</td> </tr> </table>		○	○	○			
○	○	○							
NOTE: Such other business as may properly come before the Annual Meeting or any continuation, postponement or 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.									
<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%;"></td> </tr> </table> Signature [PLEASE SIGN WITHIN BOX]				<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%;"></td> </tr> </table> Signature (Joint Owners)					
Date		Date							

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.

V44092-P08466

LYRA THERAPEUTICS, INC.
Annual Meeting of Stockholders
June 13, 2024 8:00 AM EDT
This proxy is solicited by the Board of Directors

The undersigned stockholder(s) of Lyra Therapeutics, Inc. hereby appoint(s) Maria Palasis, Ph.D. and Jason Cavalier, or either of them, as proxies, each with the power to appoint his/her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this proxy card, all of the shares of common stock of Lyra Therapeutics, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 8:00 AM EDT on June 13, 2024, via live webcast at www.virtualshareholdermeeting.com/LYRA2024, and any continuation, adjournment or postponement thereof.

Such proxies are authorized to vote in their discretion (x) for the election of any person to the Board of Directors if any nominee named herein becomes unable to serve or for good cause will not serve, (y) on any matter that the Board of Directors did not know would be presented at the Annual Meeting by a reasonable time before the proxy solicitation was made, and (z) on such other business as may properly be brought before the meeting or any continuation, adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein by the undersigned stockholder(s). 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