

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

SCHEDULE 14A

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

CATABASIS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

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(1) Amount Previously Paid:

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(2) Form, Schedule or Registration Statement No.:

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(3) Filing Party:

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(4) Date Filed:

\_\_\_\_\_

**CATABASIS PHARMACEUTICALS, INC.**  
**100 High Street, 28<sup>th</sup> Floor**  
**Boston, MA 02110**

**NOTICE OF 2021 ANNUAL MEETING OF STOCKHOLDERS**  
**To be held on June 2, 2021**

You are cordially invited to attend the 2021 Annual Meeting of Stockholders (the “Annual Meeting”) of Catabasis Pharmaceuticals, Inc., which is scheduled to be held exclusively online via the internet as a virtual web conference at [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021) on Wednesday, June 2, 2021 at 9:00 a.m. Eastern Time.

At the Annual Meeting, the stockholders will consider and vote on the following matters:

1. The election of two Class III Directors to our Board of Directors, to serve until the 2024 annual meeting of stockholders;
2. The issuance, in accordance with Nasdaq Listing Rule 5635(a), of our common stock, upon conversion of our Series X Preferred Stock issued in January and February 2021 (the “Series X Preferred Stock Conversion Proposal”);
3. The amendments to our certificate of incorporation, as amended, to effect a reverse stock split at a ratio in the range of 1-for-3 to 1-for-6, with the exact ratio to be set within that range at the discretion of our Board of Directors before December 2, 2021 without further approval or authorization of our stockholders and with our Board of Directors able to elect to abandon such proposed amendment and not effect the reverse stock split authorized by stockholders, in its sole discretion (the “Reverse Stock Split Proposal”);
4. The amendment of our Amended and Restated 2015 Stock Incentive Plan to increase the number of shares available for issuance thereunder by 6,000,000 shares (the “Plan Increase Proposal”);
5. The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2021;
6. The approval, by non-binding advisory vote, of our executive compensation;
7. The approval, by non-binding advisory vote, of the frequency of future executive compensation advisory votes; and
8. The transaction of any other business properly brought before the Annual Meeting or any adjournment or postponement thereof.

You can find more information, including the nominees for directors, in the attached proxy statement. The Board of Directors recommends that you vote in favor of each of proposals one, two, three, four, five and six and for “1 year” for proposal seven as outlined in the attached proxy statement.

We are pleased to take advantage of the Securities and Exchange Commission rules that allow us to furnish proxy materials to our stockholders on the internet.

We invite all stockholders to attend the Annual Meeting online. Stockholders of record that hold common stock at the close of business on April 5, 2021, the record date for the Annual Meeting, are entitled to notice of, and to vote at, the Annual Meeting or any adjournment or postponement of the Annual Meeting.

Whether or not you expect to attend the Annual Meeting online, please vote your shares by proxy as promptly as possible to ensure your representation and the presence of a quorum at the Annual Meeting. In addition to voting your shares on the internet by visiting [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021), you may vote your shares by telephone by calling 800-690-6903 and following the recorded instructions, or, if you received a paper copy of our mailing materials, by signing and returning a proxy card by mail. Your vote is important regardless of the number of shares you own. If you send in your proxy card or vote by

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telephone or the internet and then decide to virtually attend the Annual Meeting to vote your shares online, you may still do so. Your proxy is revocable in accordance with the procedures set forth in the proxy statement. If your shares of common stock are held in "street name," that is, held for your account by a broker or other nominee, you will receive instructions from the stockholder of record that you must follow for your shares to be voted.

By order of the Board of Directors,

A handwritten signature in black ink that reads "Jill C. Milne". The signature is written in a cursive style with a large initial "J" and "M".

Jill C. Milne, Ph.D.  
*President and Chief Executive Officer*

Boston, Massachusetts  
April 20, 2021



**Catabasis Pharmaceuticals, Inc.**  
**Proxy Statement**  
**Table of Contents**

<a href="#">Proxy Statement</a>	<a href="#">1</a>
<a href="#">Important Information About the Annual Meeting and Voting</a>	<a href="#">2</a>
<a href="#">PROPOSAL NO. 1—ELECTION OF CLASS III DIRECTORS</a>	<a href="#">8</a>
<a href="#">Corporate Governance</a>	<a href="#">12</a>
<a href="#">Executive Officers</a>	<a href="#">21</a>
<a href="#">Executive Compensation</a>	<a href="#">23</a>
<a href="#">PROPOSAL NO. 2—APPROVAL OF SERIES X PREFERRED STOCK CONVERSION PROPOSAL</a>	<a href="#">29</a>
<a href="#">PROPOSAL NO. 3—APPROVAL OF REVERSE STOCK SPLIT PROPOSAL</a>	<a href="#">35</a>
<a href="#">PROPOSAL NO. 4—APPROVAL OF PLAN INCREASE PROPOSAL</a>	<a href="#">42</a>
<a href="#">Securities Authorized for Issuance under Equity Compensation Plans</a>	<a href="#">52</a>
<a href="#">PROPOSAL NO. 5—RATIFICATION OF THE APPOINTMENT OF ERNST &amp; YOUNG LLP AS CATABASIS' INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2021</a>	<a href="#">53</a>
<a href="#">PROPOSAL NO. 6—ADVISORY VOTE ON EXECUTIVE COMPENSATION</a>	<a href="#">55</a>
<a href="#">PROPOSAL NO. 7—ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION</a>	<a href="#">56</a>
<a href="#">Principal Stockholders</a>	<a href="#">57</a>
<a href="#">Certain Relationships and Related Person Transactions</a>	<a href="#">59</a>
<a href="#">Report of the Audit Committee</a>	<a href="#">62</a>
<a href="#">Householding</a>	<a href="#">63</a>
<a href="#">Stockholder Proposals</a>	<a href="#">63</a>
<a href="#">Other Matters</a>	<a href="#">64</a>
<a href="#">Appendix A—Amendments to Certificate of Incorporation</a>	<a href="#">A-1</a>
<a href="#">Appendix B—Amended and Restated 2015 Stock Incentive Plan, as amended by the Plan Increase</a>	<a href="#">B-1</a>

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**CATABASIS PHARMACEUTICALS, INC.**  
**100 High Street, 28<sup>th</sup> Floor**  
**Boston, MA 02110**  
**617-349-1971**

**PROXY STATEMENT**

**FOR THE 2021 ANNUAL MEETING OF STOCKHOLDERS**  
**to be held on June 2, 2021**

This proxy statement contains information about the 2021 Annual Meeting of Stockholders of Catabasis Pharmaceuticals, Inc. (the “Annual Meeting”) to be held exclusively online via the Internet as a virtual web conference at [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021) on June 2, 2021 at 9:00 a.m. Eastern Time. The Board of Directors of Catabasis Pharmaceuticals, Inc. is using this proxy statement to solicit proxies for use at the Annual Meeting. In this proxy statement, unless expressly stated otherwise or the context otherwise requires, the use of “Catabasis,” “Company,” “our,” “we” or “us” refers to Catabasis Pharmaceuticals, Inc.

All properly submitted proxies will be voted in accordance with the instructions contained in those proxies. If no instructions are specified, the proxies will be voted in accordance with the recommendation of our Board of Directors with respect to each of the matters set forth in the accompanying Notice of Meeting. You may revoke your proxy at any time before it is exercised during the meeting by giving our corporate secretary written notice to that effect.

Our Annual Report to Stockholders for the fiscal year ended December 31, 2020 and this proxy statement and proxy card are first being made available to stockholders on or about April 20, 2021.

**Important Notice Regarding the Availability of Proxy Materials for  
the Annual Meeting of Stockholders to be Held on June 2, 2021:**

**This proxy statement and our 2020 Annual Report to Stockholders are  
available for viewing, printing and downloading at [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021).**

A copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, as filed with the Securities and Exchange Commission, or SEC, except for exhibits, will be furnished without charge to any stockholder upon written request to Catabasis Pharmaceuticals, Inc., Attention: Corporate Secretary, 100 High Street, 28<sup>th</sup> Floor, Boston, MA 02110. This proxy statement and our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 are also available on the SEC’s website at [www.sec.gov](http://www.sec.gov) and our website at [www.catabasis.com](http://www.catabasis.com).

## IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

### Purpose of the Annual Meeting

At the Annual Meeting, our stockholders will consider and vote on the following matters:

1. The election of two Class III directors to our Board of Directors, to serve until the 2024 annual meeting of stockholders;
2. The issuance, in accordance with Nasdaq Listing Rule 5635(a), of our common stock, upon conversion of our Series X Preferred Stock issued in January and February 2021 (the “Series X Preferred Stock Conversion Proposal”);
3. The amendments to our certificate of incorporation, as amended, to effect a reverse stock split at a ratio in the range of 1-for-3 to 1-for-6, with the exact ratio to be set within that range at the discretion of our Board of Directors before December 2, 2021 without further approval or authorization of our stockholders and with our Board of Directors able to elect to abandon such proposed amendment and not effect the reverse stock split authorized by stockholders, in its sole discretion (the “Reverse Stock Split Proposal”);
4. The amendment of our Amended and Restated 2015 Stock Incentive Plan to increase the number of shares available for issuance thereunder by 6,000,000 shares (the “Plan Increase Proposal”);
5. The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2021;
6. The approval, by non-binding advisory vote, of our executive compensation;
7. The approval, by non-binding advisory vote, of the frequency of future executive compensation advisory votes; and
8. The transaction of any other business properly brought before the Annual Meeting or any adjournment or postponement thereof.

As of the date of this proxy statement, we are not aware of any business to come before the meeting other than the first seven items noted above.

### Board of Directors Recommendation

Our Board of Directors unanimously recommends that you vote:

**FOR** the election of the nominees to serve as Class III Directors on our Board of Directors for a three-year term;

**FOR** the Series X Preferred Stock Conversion Proposal;

**FOR** the Reverse Stock Split Proposal;

**FOR** the Plan Increase Proposal;

**FOR** the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2021;

**FOR** the approval, on an advisory basis, of the compensation of our named executive officers; and

**FOR** the approval, on an advisory basis, of the option of “**1 YEAR**” for the frequency of future executive compensation advisory votes.

### Notice of Internet Availability of Proxy Materials

Pursuant to rules adopted by the SEC, we have elected to provide access to our proxy materials via the internet. Accordingly, we are sending a notice of internet availability of proxy materials to our stockholders.

All stockholders will have the ability to access the proxy materials on the website referenced in the notice and to request to receive a printed set of the proxy materials by mail. Instructions on how to access the proxy materials over the internet and how to request a printed copy may be found in the notice. In addition, stockholders may request to receive proxy materials in printed form by mail or electronically by email on an ongoing basis. We encourage stockholders to take advantage of the availability of the proxy materials on the internet or through email to help reduce the environmental impact of our annual meetings. The proxy materials, including this proxy statement, directions to register for the virtual Annual Meeting and voting instructions and our 2020 Annual Report on Form 10-K, are also available for viewing, printing and downloading on the internet at [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021).

### **Who Can Vote at the Annual Meeting**

Only stockholders of record of common stock at the close of business on the record date of April 5, 2021 are entitled to receive notice of the Annual Meeting and to vote the shares of our common stock that they held on that date. As of April 5, 2021, there were 23,417,006 shares of common stock issued and outstanding. Each share of common stock is entitled to one vote on each matter properly brought before the Annual Meeting.

Of the shares of our common stock issued and outstanding and entitled to vote, 3,332,669 shares of common stock were issued in the Quellis Acquisition (as described below under “Proposal No. 2—Approval of Series X Preferred Stock Conversion Proposal—Descriptions of the Transactions”) and are not entitled to vote on Proposal No. 2 under the listing rules of the Nasdaq Stock Market. We anticipate that these 3,332,669 shares of common stock will be voted in favor of Proposal No. 2 for purposes of adopting the proposal under Delaware law. However, to comply with Nasdaq rules, we will instruct the inspector of elections to conduct a separate tabulation that subtracts the votes represented by these shares from the total number of shares voted on Proposal No. 2 to determine whether that proposal has been adopted in accordance with applicable Nasdaq rules.

On the record date, there were 86,077 shares of Series X Preferred Stock issued and outstanding, all of which were issued in the Quellis Acquisition and February 2021 Financing (as described below under “Proposal No. 2—Approval of Series X Preferred Stock Conversion Proposal—Description of the Transactions”). The Series X Preferred Stock is not entitled to vote on the matters being considered at the Annual Meeting.

### ***Difference between a “stockholder of record” and a beneficial owner of shares held in “street name”***

*Stockholder of Record.* If you have shares of common stock registered directly in your name with our transfer agent, American Stock Transfer & Trust Company, LLC, then you are considered a “stockholder of record” of those shares. For these shares, your set of proxy materials has been made available to you directly by us. You may vote these shares by proxy prior to the Annual Meeting by following the instructions contained on the notice of internet availability of proxy materials or proxy card.

*Beneficial Owner of Shares Held in Street Name.* If you hold shares of common stock in a brokerage account or through a bank, trust or other nominee or custodian, then you are considered the beneficial owner of those shares, which are held in “street name.” For these shares, your set of proxy materials has been made available to you by that organization. The organization holding your account is considered the stockholder of record for purposes of voting at the Annual Meeting. As the beneficial owner, you have the right to instruct that organization as to how to vote the shares of common stock held in your account by following the instructions contained on the notice of internet availability of proxy materials or the voting instruction card provided to you by that organization.

### **How to Attend the Annual Meeting**

We will host the Annual Meeting via the internet. You will not be able to attend the meeting in person. Participation in the Annual Meeting as a stockholder, with the right to vote and submit questions, is limited to stockholders as of the close of business on the record date. The meeting can be accessed at: [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021).

Other stockholders and members of the public can also access the Annual Meeting at the URL above without a control number, but without the right to vote or submit a question.

The webcast of the Annual Meeting will begin at 9:00 a.m., Eastern Time, on June 2, 2021. Online access will begin at 8:45 a.m., Eastern Time, and we encourage you to log into the Annual Meeting 5 to 15 minutes prior to the start time.

If you encounter difficulties accessing the Annual Meeting, please call the technical support number that will be posted on the registration page for the meeting website.

**Stockholder of record.** If you were a stockholder of record at the close of business on the record date, you will need the 16-digit control number found on your notice of internet availability, your proxy card or the instructions that accompany your proxy materials. You do not need to do anything in advance to access the Annual Meeting.

**Beneficial owner.** If you were a beneficial owner at the close of business on the record date, you may attend the Annual Meeting. You will need the 16-digit control number found on your notice of internet availability, your proxy card or the instructions that accompany your proxy materials if you wish to attend the Annual Meeting.

## How to Vote

**Stockholder of Record.** If you are a stockholder of record of common stock, you can vote your shares in one of two ways: either by proxy or online at the Annual Meeting. If you choose to vote by proxy, you may do so by telephone, via the internet or by mail. Each of these methods is explained below.

- *By Telephone.* If you request printed copies of the proxy materials by mail and you live in the United States or Canada, you may vote by proxy by calling the toll-free number found on the proxy card. You must have the control number that is on the notice of internet availability of proxy materials or the proxy card when voting. If you choose to vote by telephone, you do not have to return the proxy card.
- *By Internet.* You may transmit your proxy voting instructions via the internet by following the instructions provided on the notice of internet availability of proxy materials or the proxy card. You will need to have the control number that is on the notice of internet availability of proxy materials or the proxy card when voting. If you choose to vote via the internet, you do not have to return the proxy card.
- *By Mail.* If you request printed copies of the proxy materials by mail, you may vote by proxy by completing, signing and dating the proxy card and returning it in the envelope provided.
- *Online During the Annual Meeting.* If you plan to attend the Annual Meeting ([www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021)), you may vote by following the instructions provided online during the meeting. However, even if you plan to attend the Annual Meeting, we encourage you to submit your vote ahead of time by one of the methods listed above. If you vote by proxy prior to the Annual Meeting and choose to attend the Annual Meeting online, there is no need to vote again during the Annual Meeting unless you wish to change your vote.

Telephone and internet voting for stockholders of record that hold common stock will be available up until 11:59 p.m. Eastern Time on June 1, 2021 and mailed proxy cards must be received by June 1, 2021 in order to be counted at the Annual Meeting. If the Annual Meeting is adjourned or postponed, these deadlines may be extended.

**Beneficial Owner of Shares Held in Street Name.** If your shares are held in street name (held for your account by a broker or other nominee):

- *By Telephone or Internet.* You will receive instructions, or a voting instruction form from your broker or other nominee if you are permitted to vote by telephone or internet.
- *By Mail.* You will receive instructions from your broker or other nominee explaining how to vote your shares by mail.



- *Online During the Annual Meeting.* You will need the control number that will be included on your notice of internet availability of proxy materials, proxy card or voting instruction card in order to demonstrate proof of beneficial ownership and to be able to vote during the Annual Meeting. Instructions on how to vote may also be found at [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021).

The voting deadlines and availability of telephone and internet voting for beneficial owners of shares held in “street name” will depend on the voting processes of the organization that holds your shares. Therefore, we urge you to carefully review and follow the instructions that you receive from that organization.

***If you hold your shares of our common stock in multiple accounts, you should vote your shares as described in each set of proxy materials you receive.***

### **Quorum**

A quorum of stockholders is necessary to hold a valid meeting. Our bylaws provide that a quorum will exist if stockholders holding a majority of the shares of stock issued and outstanding and entitled to vote are present at the meeting in person or by proxy. Shares present virtually during the Annual Meeting will be considered shares of common stock represented in person at the meeting. Abstentions and broker non-votes count as present for establishing a quorum but will not be counted as votes cast. Broker non-votes occur when your broker or other nominee submits a proxy for your shares (because the broker or other nominee has received instructions from you on one or more proposals, but not all, or has not received instructions from you but is entitled to vote on a particular “discretionary” matter) but does not indicate a vote for a particular proposal because the broker or other nominee either does not have the authority to vote on that proposal and has not received voting instructions from you or has discretionary authority but chooses not to exercise it. If a quorum is not present, the meeting may be adjourned until a quorum is obtained.

### **Ballot Measures Considered “Routine” and “Non-Routine”**

The election of directors (Proposal No. 1) is considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposal No. 1.

The Series X Preferred Stock Conversion Proposal (Proposal No. 2) is considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposal No. 2.

The Reverse Stock Split Proposal (Proposal No. 3) is considered routine under applicable rules. A broker or other nominee may generally exercise discretionary authority and vote on routine matters. If they exercise this discretionary authority, no broker non-votes are expected to exist in connection with Proposal No. 3.

The Plan Increase Proposal (Proposal No. 4) is considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposal No. 4.

The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2021 (Proposal No. 5) is considered routine under applicable rules. A broker or other nominee may generally exercise discretionary authority and vote on routine matters. If they exercise this discretionary authority, no broker non-votes are expected to exist in connection with Proposal No. 5.

The advisory vote on executive compensation (Proposal No. 6) is considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposal No. 6.

The advisory vote on the frequency of future executive compensation advisory votes (Proposal No. 7) is considered non-routine under applicable rules. A broker or other nominee cannot vote without instructions on non-routine matters, and therefore there may be broker non-votes on Proposal No. 7.

**Votes Required to Elect Directors, Approve Series X Preferred Stock Conversion Proposal, Approve Reverse Stock Split Proposal, Approve Plan Increase Proposal, Ratify Appointment of Ernst & Young LLP, Approve Executive Compensation and Approve the Frequency of Future Executive Compensation Advisory Votes.**

Directors are elected by a plurality of the votes cast by stockholders entitled to vote at the meeting (Proposal No. 1). This means that the two nominees receiving the most votes “for” will be elected. Shares represented by proxies that withhold authority to vote for a nominee for election as a director will not be counted as votes “for” a director. Abstentions and broker non-votes will have no effect on this proposal.

The approval of Series X Preferred Stock Conversion Proposal requires the affirmative vote of a majority of the shares of common stock present or represented by proxy and voted “for” or “against” such matter (Proposal No. 2), subject to the separate tabulation of votes described in “Who Can Vote at the Annual Meeting” set forth above. Abstentions and broker non-votes, if any, will have no effect on this proposal.

The approval of the Reverse Stock Split Proposal requires the holders of a majority of our outstanding shares of common stock to vote “for” such proposal (Proposal No. 3). Abstentions and broker non-votes will have the effect of a vote “against” this proposal.

The approval of the Plan Increase Proposal requires the affirmative vote of a majority of the shares of common stock present or represented by proxy and voted “for” or “against” such matter (Proposal No. 4). Abstentions and broker non-votes, if any, will have no effect on this proposal.

The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm requires the affirmative vote of a majority of the shares of common stock present or represented by proxy and voted “for” or “against” such matter (Proposal No. 5). Abstentions and broker non-votes, if any, will have no effect on this proposal.

The approval, by non-binding advisory vote, of our executive compensation requires the affirmative vote of a majority of the shares of common stock present or represented by proxy and voted “for” or “against” such matter (Proposal No. 6). Abstentions and broker non-votes, if any, will have no effect on this proposal.

The approval, by non-binding advisory vote, of the frequency of future executive compensation advisory votes requires the affirmative vote of a majority of the shares of common stock present or represented by proxy and voted for “1 year” “2 years” or “3 years” (Proposal No. 7). With respect to this proposal, if none of the frequency options (1 year, 2 years or 3 years) receives a majority vote, we will consider the frequency that receives the highest number of votes cast by stockholders to be the frequency that has been approved by stockholders. Abstentions and broker non-votes, if any, will have no effect on this proposal.

**Method of Counting Votes**

Each holder of common stock is entitled to one vote at the Annual Meeting on each matter to come before the Annual Meeting, including the election of directors, for each share held by such stockholder as of the record date. Votes cast online at the Annual Meeting or by proxy by mail, via the internet or by telephone will be tabulated by the inspector of election appointed for the Annual Meeting, who will also determine whether a quorum is present.

**Revoking a Proxy; Changing Your Vote**

If you are a stockholder of record that holds common stock, you may revoke your proxy before the vote is taken at the meeting:

- by submitting a new proxy with a later date before the applicable deadline either signed and returned by mail or transmitted using the telephone or internet voting procedures described in the “How to Vote” section above;
- by voting online at the meeting; or
- by filing a written revocation with our corporate secretary.

If your shares are held in “street name,” you may submit new voting instructions by contacting your broker or other organization holding your account. You may also vote online at the Annual Meeting, which will have the effect of revoking any previously submitted voting instructions, if you obtain a legal proxy from the organization that holds your shares as described in the “How to Vote” section above.

Your attendance at the Annual Meeting will not automatically revoke your proxy.

#### **Costs of Proxy Solicitation**

We will bear the costs of soliciting proxies. In addition to solicitations by mail, our directors, officers and regular employees, without additional remuneration, may solicit proxies by telephone, facsimile, email, personal interviews and other means. In addition, we have engaged The Proxy Advisory Group, LLC to assist in the solicitation of proxies and provide related advice and information support, for a services fee and the reimbursement of customary disbursements, which are not expected to exceed \$30,000 in total.

#### **Voting Results**

We plan to announce preliminary voting results at the Annual Meeting and to publish final results in a Current Report on Form 8-K to be filed with the SEC within four business days following the Annual Meeting.

#### **Appraisal Rights**

Our stockholders are not entitled to dissenters’ or appraisal rights under the General Corporation Law of the State of Delaware with respect to any of the proposals being voted on.

### PROPOSAL NO. 1—ELECTION OF CLASS III DIRECTORS

Our Board of Directors is divided into three classes, with one class of our directors standing for election each year, for a three-year term. The authorized size of our Board of Directors is currently eight. Directors for each class are elected at the annual meeting of stockholders held in the year in which the term for their class expires and hold office until their resignation or removal or their successors are duly elected and qualified. In accordance with our certificate of incorporation and bylaws, our directors may fill existing vacancies on the Board of Directors by appointment. The members of the classes are as follows:

- the Class I directors are Jill Milne, Fred Callori and Michael Kishbauch, and their term will expire at the annual meeting of stockholders to be held in 2022;
- the Class II directors are Kenneth Bate, Joanne Beck and Hugh Cole, and their term will expire at the annual meeting of stockholders to be held in 2023; and
- the Class III directors are Gregg Lapointe and Jonathan Violin, and their term will expire at the Annual Meeting.

Our bylaws require that each of the classes of our Board of Directors consist, as nearly as may be possible, of one-third of the total number of directors constituting our entire Board of Directors. Our Board of Directors, on the recommendation of our nominating and corporate governance committee, has nominated Gregg Lapointe and Jonathan Violin for re-election as Class III directors at the Annual Meeting. Each Class III director that is elected at the Annual Meeting will be elected to serve for a three-year term that will expire at our annual meeting of stockholders to be held in 2024.

If no contrary indication is made, proxies will be voted for Mr. LaPointe and Dr. Violin or, in the event that any of these candidates is not a candidate or is unable to serve as a director at the time of election (which is not currently expected), for any substitute nominee who is designated by our Board of Directors.

We have no formal policy regarding diversity of our Board of Directors. Our priority in selection of Board members is identification of members who will further the interests of our stockholders through their established record of professional accomplishment, the ability to contribute positively to the collaborative culture among Board members, knowledge of our business and understanding of the competitive landscape and adherence to high ethical standards. Certain individual skills and qualifications of our directors, which we believe contribute to the effectiveness of the Board of Directors as a whole, are described in the section below under “Information Regarding Directors.”

#### Information Regarding Directors

The information set forth below as to the directors and nominees for director has been furnished to us by the directors and nominees for director:

#### Nominees for Election to the Board of Directors For a Three-Year Term Expiring at the 2024 Annual Meeting of Stockholders (Class III)

<u>Name</u>	<u>Age</u>	<u>Present Position with Catabasis Pharmaceuticals, Inc.</u>
Gregg Lapointe	62	Director
Jonathan Violin	45	Director

**Gregg Lapointe** has served as a member of our Board of Directors since January 2019. Since 2012, Mr. Lapointe has served as Co-Founder and Chief Executive Officer of Cerium Pharmaceuticals, Inc., a privately held biopharmaceutical company. He previously held varying roles at Sigma-Tau Pharmaceuticals, Inc., a privately held biopharmaceutical company, from 2001 through 2012, including Chief Operating Officer from 2003 to 2008 and Chief Executive Officer from 2008 to 2012. From 1996 to 2001, Mr. Lapointe served as Vice President of Operations and Vice President, Controller of AstenJohnson, Inc. (formerly JWI Inc.). Mr. Lapointe began his career at Price Waterhouse and is a Certified Public Accountant. He currently serves on the Board of Directors of two public biopharmaceutical companies: Soligenix, Inc. and Rigel Pharmaceuticals, Inc. During the last five years, Mr. Lapointe served as a member of the Board of

Directors of public biotechnology companies Plus Therapeutics, Inc. (formerly known as Cytori Therapeutics, Inc.), SciClone Pharmaceuticals, Inc., Raptor Pharmaceuticals, Inc. and ImmunoCellular Therapeutics, Inc. He holds an M.B.A. from Duke University, is a Certified Public Accountant, and holds a Bachelor of Commerce from Concordia University. We believe that Mr. Lapointe is qualified to serve on our Board of Directors because of his significant experience in the areas of finance, management and specialty drug commercialization and his experience as an executive officer and board member in the pharmaceutical industry.

**Jonathan Violin, Ph.D.**, has served member of our Board of Directors since January 2021. Dr. Violin is a co-founder of Quellis Biosciences, Inc. (“Quellis”) and was its Treasurer and Secretary from December 2018 until our acquisition of Quellis in January 2021, and served as President of Quellis from December 2018 to December 2020. Dr. Violin has served as President and Chief Executive Officer of Viridian Therapeutics, Inc. (formerly, Miragen Therapeutics, Inc., “Viridian”), a publicly traded biotechnology company, since January 2021 and he previously served as President and Chief Operating Officer of Viridian from October 2020 until January 2021. Dr. Violin also co-founded Dianthus Therapeutics, Inc., a biotechnology company, in May 2019 and co-founded and helped lead Trevena Inc., a biotechnology company, in various roles from 2008 until November 2018, most recently as SVP, Scientific Affairs and Investor Relations Officer. Dr. Violin holds a Ph.D. from the Department of Pharmacology at the University of California, San Diego, a Master of Business Administration with a concentration in Health Sector Management from the Fuqua School of Business, and a Bachelor of Sciences in Chemical Pharmacology from Duke University. We believe that Dr. Violin is qualified to serve on our Board of Directors because of his deep clinical and scientific experience, especially in the areas of discovering and developing novel therapeutics, and experience as an executive officer in the pharmaceutical industry.

#### Vote Required and Board of Directors Recommendation

To be elected, a director must receive a plurality of the votes cast by stockholders entitled to vote at the meeting. Shares represented by proxies that withhold authority to vote for a nominee for election as a director will not be counted as votes “for” a director.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE FOR THE ELECTION OF GREGG LAPOINTE AND JONATHAN VIOLIN.**

#### Members of the Board of Directors Continuing in Office

##### Term Expiring at the 2022 Annual Meeting of Stockholders (Class I)

<u>Name</u>	<u>Age</u>	<u>Present Position with Catabasis Pharmaceuticals, Inc.</u>
Fred Callori	53	Director
Michael Kishbauch	72	Director
Jill Milne	53	President, Chief Executive Officer and Director

**Fred Callori** has served member of our Board of Directors since January 2021. Since September 2017, Mr. Callori has served as Senior Vice President, Corporate Development at Xontogeny, LLC, a life sciences accelerator. Mr. Callori has also served as a partner in the Perceptive Xontogeny Venture Fund since December 2019. Prior to Xontogeny and Perceptive, from 1998 to August 2017, Mr. Callori was a partner in the Life Science and Emerging Companies practices of Choate, Hall & Stewart LLP. Mr. Callori holds a J.D. from Boston University School of Law and a B.A. in Economics from Binghamton University. We believe Mr. Callori is qualified to serve on our Board of Directors because of his experience in the life sciences industry and his corporate governance experience.

**Michael Kishbauch** has served as a member of our Board of Directors since April 2016. Mr. Kishbauch previously served as President and Chief Executive Officer of Achillion Pharmaceuticals, a publicly held biopharmaceutical company, from July 2004 until his retirement in September 2013. Prior to that, he founded and, from 1996 to 2004, served as President and Chief Executive Officer of OraPharma, a commercial-stage pharmaceutical company focused on oral health care that was acquired by Johnson & Johnson in 2003. Mr. Kishbauch also held senior management positions with MedImmune, Inc., a biotechnology company,

from 1992 to 1995. Mr. Kishbauch formerly served as a director of Achillion Pharmaceuticals, Inc., a biotechnology company, from July 2004 through January 2020, Progenics Pharmaceuticals, Inc., a biopharmaceutical company, from 2013 through 2019 and TetraLogic Pharmaceuticals Corporation from 2014 through 2016. Mr. Kishbauch holds an M.B.A. from The Wharton School of the University of Pennsylvania and a B.A. in biology from Wesleyan University. We believe that Mr. Kishbauch is qualified to serve on our Board of Directors because of his extensive experience as an entrepreneur and manager and as a public company senior executive in the biopharmaceutical industry.

**Jill Milne, Ph.D.**, is a co-founder of our company and has served as a member of our Board of Directors and as our President and Chief Executive Officer since June 2008. Prior to co-founding our company, Dr. Milne worked as head of discovery biology at Sirtris Pharmaceuticals, a biotechnology company, from 2004 to 2008, when it was acquired by GlaxoSmithKline. From 1998 to 2004, Dr. Milne worked at Pfizer Global Research and Development, where she served as the worldwide head of the Drug Pfunder Program and head of the Enzyme Target Group at the Pfizer Discovery Technology Center in Cambridge, Massachusetts. Prior to joining Pfizer, she was an American Cancer Society postdoctoral fellow in the department of biological chemistry and molecular pharmacology at Harvard Medical School from 1995 to 1998. Dr. Milne holds a Ph.D. from Harvard University and a B.A. in biological chemistry from Wellesley College. We believe that Dr. Milne is qualified to serve on our Board of Directors because of her extensive leadership experience in the life sciences industry and her extensive knowledge of our company based on her role as co-founder and Chief Executive Officer.

**Term Expiring at the  
2023 Annual Meeting of Stockholders (Class II)**

<u>Name</u>	<u>Age</u>	<u>Present Position with Catabasis Pharmaceuticals, Inc.</u>
Kenneth Bate	70	Director, Chair of the Board of Directors
Joanne Beck	60	Director
Hugh Cole	56	Director

**Kenneth Bate** has served as a member of our Board of Directors since January 2014, as Co-Chair from February 2016 to February 2019, and as Chair since February 2019. Mr. Bate has served as an independent consultant in the biotechnology field since 2012. From April 2009 until December 2011, Mr. Bate was the President and Chief Executive Officer of Archemix, a privately held biotechnology company. From March 2006 to April 2009, Mr. Bate served in various positions at NitroMed, a public pharmaceutical company, most recently as President and Chief Executive Officer. From 2002 to 2005, Mr. Bate was head of commercial operations and Chief Financial Officer at Millennium Pharmaceuticals. Prior to joining Millennium, Mr. Bate co-founded JSB-Partners, LLC, a banking and advisory services firm for biopharmaceutical and life sciences companies. From 1990 to 1996, Mr. Bate was employed with Biogen, Inc., a public biotechnology company, first as its Chief Financial Officer and then as head of the commercial organization. Mr. Bate is a director of four other public biopharmaceutical companies: AVEO Pharmaceuticals, Genoea Biosciences, Epizyme Pharmaceuticals and Madrigal Pharmaceuticals. During the last five years, Mr. Bate served as a member of the board of directors of public biopharmaceutical companies Cubist Pharmaceuticals, Biomarin Pharmaceutical and Vanda Pharmaceuticals. He holds an M.B.A. from The Wharton School of the University of Pennsylvania and a B.A. in chemistry from Williams College. We believe that Mr. Bate's qualifications to serve on our Board of Directors include his operating, finance, commercial, transactional and senior management experience in the industry, as well as his experience serving on the boards of directors of other public companies in the life sciences industry.

**Joanne Beck, Ph.D.**, has served as a member of our Board of Directors since February 2019. Dr. Beck is currently the Chief Operations Officer at Boston Pharmaceuticals, a privately held biopharmaceutical company, a position in which she has served since December 2019. From April 2016 to December 2019, Dr. Beck served as the Executive Vice President of Global Pharmaceutical Development and Operations at Celgene Corporation, a publicly held biopharmaceutical company. From 2012 to March 2016, Dr. Beck was Senior Vice President of Pharmaceutical Development at Shire Plc, a former publicly held biopharmaceutical company. Prior to Shire, she held positions of increasing responsibility in Global Pharmaceutical Operations at Abbott Laboratories, a publicly held pharmaceuticals and healthcare products company, and was the

site head of Abbott Vascular Instruments GmbH. Prior to Abbott, Dr. Beck held positions in Process Development at Genentech and Amgen. Dr. Beck currently serves as a member of the board of directors of public biopharmaceutical company Orchard Therapeutics. Dr. Beck holds a Ph.D. in biochemistry and molecular biology from Oregon Health and Science University and completed a postdoctoral fellowship in the department of Pharmaceutical Chemistry at the University of California, San Francisco, and holds a B.A. in chemistry from Lewis and Clark College. We believe that Dr. Beck is qualified to serve on our Board of Directors because of her significant experience in the areas of process development, manufacturing and supply chain of biopharmaceuticals and her experience as an executive officer and board member in the pharmaceutical industry.

**Hugh Cole** has served as a member of our Board of Directors since July 2019. Mr. Cole is currently the Chief Business Officer and Head of Corporate Development at Jounce Therapeutics, a publicly held biotechnology company, a position in which he has served since August 2017. From 2014 to July 2017, Mr. Cole was the Chief Business Officer at ARIAD Pharmaceuticals, a publicly held pharmaceutical company. Prior to ARIAD Pharmaceuticals, he held positions of increasing responsibility at Shire Pharmaceuticals, most recently Senior Vice President, Strategic Planning and Program Management from 2012 to 2014, Global Franchise Leader from 2009 to 2012, and head of Business Development for Shire's rare disease business from 2007 to 2009. Prior to Shire, Mr. Cole held various positions in Business Development at Oscient Pharmaceuticals and Millennium Pharmaceuticals. Mr. Cole holds an A.B. in Chemistry from Harvard University and an M.B.A. in Health Care Management and Finance from The Wharton School of the University of Pennsylvania. We believe that Mr. Cole is qualified to serve on our Board of Directors because of his significant experience in the areas of business development and strategic planning and his experience as an executive officer in the pharmaceutical industry.

## CORPORATE GOVERNANCE

### General

We believe that good corporate governance is important to ensure that Catabasis is managed for the long-term benefit of our stockholders. This section describes key corporate governance practices that we have adopted. We have adopted a code of business conduct and ethics, which applies to all of our officers, directors and employees, and corporate governance guidelines and charters for our audit committee, our compensation committee, our nominating and governance committee and our science and technology committee. We have posted copies of our code of business conduct and ethics and corporate governance guidelines, as well as each of our committee charters, on the “Corporate Governance” page of the “Investors” section of our website, [www.catabasis.com](http://www.catabasis.com), which you can access free of charge. Information contained on the website is not incorporated by reference in, or considered part of, this proxy statement. We will also provide copies of these documents, as well as our other corporate governance documents, free of charge, to any stockholder upon written request to Catabasis Pharmaceuticals, Inc., 100 High Street, 28<sup>th</sup> Floor, Boston, MA 02110, Attention: Investor Relations. We intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be disclosed by law or Nasdaq listing standards.

### Director Independence

Rule 5605 of the Nasdaq Listing Rules requires a majority of a listed company’s board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company’s audit, compensation and nominating and corporate governance committees be independent, that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and that compensation committee members also satisfy heightened independence requirements contained in the Nasdaq Listing Rules as well as Rule 10C-1 under the Exchange Act.

Under Rule 5605(a)(2), a director will only qualify as an “independent director” if, in the opinion of our Board of Directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

When determining the independence of the members of our compensation committee under the heightened independence requirements contained in the Nasdaq Listing Rules and Rule 10C-1, our Board of Directors is required to consider all factors specifically relevant to determining whether a director has a relationship with us that is material to that director’s ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (1) the source of compensation of that director, including any consulting, advisory or other compensatory fee paid by us to that director; and (2) whether that director is affiliated with our company, a subsidiary of our company or an affiliate of a subsidiary of our company.

Our Board of Directors has reviewed the composition of our Board of Directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our Board of Directors has determined that each of our directors, other than Dr. Milne, is an “independent director” as defined under Rule 5605(a)(2) of the Nasdaq Listing Rules. Our Board of Directors also has determined that Mr. Lapointe, Mr. Bate and Mr. Cole, who comprise our audit committee, and Mr. Kishbauch, Dr. Beck, and Mr. Callori, who comprise our compensation committee, satisfy the independence standards for such committees established by the SEC and the Nasdaq Listing Rules, as applicable. In making such determinations, our Board of Directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our Board of



Directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

### **Board Leadership Structure**

Our Board of Directors has chosen to separate the role of our Chief Executive Officer and the role of Chair of the Board of Directors. Our Board of Directors is currently chaired by Mr. Bate, who possesses an in-depth knowledge of the issues, opportunities and challenges we face. We believe he is the person best positioned to ensure our Board of Directors' time and attention is focused on the most critical matters. We currently separate the roles of Chair of the Board of Directors and Chief Executive Officer because we believe that this structure enhances the Board's oversight of, and independence from, management, and enables the Board to carry out its responsibilities on behalf of our stockholders. This leadership structure also allows Dr. Milne, our Chief Executive Officer, to focus her time and energy on operating and managing the Company, while leveraging the experience and perspective of Mr. Bate.

### **The Board's Role in Risk Oversight**

Our Board of Directors has responsibility for the oversight of the company's risk management processes and, either as a whole or through its committees, regularly discusses with management our major risk exposures, the potential impact of these risks on our business and the steps we take to manage them. The risk oversight process includes receiving regular reports from Board committees and members of senior management to enable our Board to understand the company's risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk.

The audit committee reviews information regarding liquidity and operations and oversees our management of financial risks. Periodically, the audit committee reviews our policies with respect to risk assessment, risk management, loss prevention and regulatory compliance. Oversight by the audit committee includes direct communication with our external auditors, and discussions with management regarding significant risk exposures and the actions management has taken to limit, monitor or control such exposures. The compensation committee is responsible for assessing whether any of our compensation policies or programs has the potential to encourage excessive risk-taking. The nominating and corporate governance committee manages risks associated with the independence of the Board of Directors, corporate disclosure practices, and potential conflicts of interest. The science and technology committee has responsibility for risk management in areas affecting our research and development. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire Board of Directors is regularly informed through committee reports about such risks. Matters of significant strategic risk are considered by our Board of Directors as a whole.

### **Board of Directors Meetings**

Our Board of Directors met 12 times during 2020 and acted by written consent once in 2020. During the year, each of our directors attended 75% or more of the total number of meetings of the Board of Directors and the committees on which he or she served.

### **Committees of the Board of Directors**

We have four standing committees: the audit committee, the compensation committee, the nominating and corporate governance committee and the science and technology committee. Each of these committees has a written charter approved by our Board of Directors. A copy of each charter can be found on the "Corporate Governance" page of the "Investors" section of our website at [www.catabasis.com](http://www.catabasis.com).

#### *Audit Committee*

The members of our audit committee are Mr. Bate, Mr. Cole and Mr. Lapointe. Mr. Lapointe is the chair of the audit committee and served in that capacity in 2020. Our Board of Directors has determined that each of Mr. Bate, Mr. Cole and Mr. Lapointe qualifies as an "audit committee financial expert" within the meaning of SEC regulations and the Nasdaq Listing Rules. In making this determination, our Board

of Directors has considered the formal education and nature and scope of each such director's previous experience, coupled with past and present service on various audit committees. Our audit committee assists our Board of Directors in its oversight of our accounting and financial reporting process and the audits of our financial statements. The audit committee met six times during 2020, with two of those meetings being joint meetings with the Board's non-standing pricing committee. The audit committee's responsibilities include:

- 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;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function, if any;
- discussing our risk management policies;
- establishing policies and procedures for the receipt, retention and treatment of accounting-related complaints and concerns;
- meeting independently with our 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.

We believe that the composition of our audit committee meets the requirements for independence under current Nasdaq listing standards and SEC rules and regulations. Our Board of Directors has determined that Mr. Bate, Mr. Cole and Mr. Lapointe are independent as independence is currently defined in applicable Nasdaq listing standards and SEC rules and regulations.

#### *Compensation Committee*

The current members of our compensation committee are Dr. Beck, Mr. Callori and Mr. Kishbauch. Mr. Callori was appointed to the compensation committee in January 2021 upon his joining our Board of Directors in connection with the Quellis Acquisition. Mr. Kishbauch is the chair of the compensation committee and served in that capacity during 2020. Our compensation committee assists our Board of Directors in the discharge of its responsibilities relating to the compensation of our executive officers. The compensation committee met six times during 2020. The compensation committee's responsibilities include:

- reviewing and approving, or making recommendations to our Board of Directors with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing the evaluation of senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our Board of Directors with respect to director compensation; and
- preparing the compensation committee report required by SEC rules, if applicable.

We believe that the composition of our compensation committee meets the requirements for independence under current Nasdaq listing standards and SEC rules and regulations. Our Board of Directors has determined that Dr. Beck, Mr. Callori and Mr. Kishbauch are independent as independence is currently defined in applicable Nasdaq listing standards and SEC rules and regulations.

The compensation committee engaged Aon Rewards Solutions, a part of Aon plc ("Aon"), as its compensation consultant in connection with making compensation recommendations for our executive

officers for 2020. Our compensation committee considered the relationship that Aon has with us, the members of our Board of Directors and our executive officers. Based on the committee's evaluation, the compensation committee has determined that no conflicts of interest exist between our company and Aon.

Aon assisted the committee in conducting a competitive compensation assessment for our executive officers for 2020. In evaluating the total compensation of our executive officers, the compensation committee, with the assistance of Aon, established a peer group of 18 publicly traded companies in the biopharmaceutical industry that was selected based on companies whose market capitalization, number of employees and stage of clinical development are similar to ours as of the time the peer group was established in December 2019. Four of the peer companies included in our peer group for assessing 2019 compensation were excluded from, and ten were added to, the current peer group analysis in order to better align the peer group with the criteria noted above and due to acquisitions of certain previous peer group companies.

The peer group for our executive benchmarking as approved by the compensation committee for 2020 was comprised of the following companies:

Actinium Pharmaceuticals	Catalyst Biosciences	Marinus Pharmaceuticals
Akari Therapeutics	Chiasma	Matinas BioPharma
Allena Pharmaceuticals	Cidara Therapeutics	Ovid Therapeutics
Anavex Pharmaceuticals	Eiger BioPharmaceuticals	Proteostasis Therapeutics
Aridis Pharmaceuticals	Entasis Therapeutics	Pulmatix
aTyr Pharma	Eyenovia	Trevena

Aon then supplemented the peer group information with published survey data, which provided a broader market representation of companies and deeper position reporting.

The compensation committee approves the compensation objectives for our company, approves the compensation of our executive officers (other than our Chief Executive Officer) and provides a recommendation to our Board of Directors on the compensation of the Chief Executive Officer. The compensation committee reviews all compensation components including base salary, bonus, benefits, equity incentives and other perquisites, as well as severance arrangements, change-in-control benefits and other forms of executive officer compensation. See "Executive Compensation—Narrative to Summary Compensation Table" below for more information regarding the roles of the compensation committee, the Board of Directors, and compensation consultants in determining or recommending the amount or form of executive compensation.

#### *Nominating and Corporate Governance Committee*

The members of our nominating and corporate governance committee are Mr. Bate, Mr. Callori and Mr. Kishbauch. Mr. Callori was appointed to the nominating and corporate governance committee in January 2021 upon his joining our Board of Directors in connection with the Quellis Acquisition. Mr. Bate is the chair of the nominating and corporate governance committee and served in that capacity in 2020. The nominating and corporate governance committee met once during 2020. The nominating and corporate governance committee's responsibilities include:

- identifying individuals qualified to become members of our Board of Directors;
- recommending to our Board of Directors the persons to be nominated for election as directors and to each committee of our Board of Directors;
- reviewing and making recommendations to the Board of Directors relating to management succession planning;
- developing and recommending corporate governance principles to the Board of Directors; and
- overseeing periodic evaluations of the Board of Directors.

We believe that the composition of our nominating and corporate governance committee meets the requirements for independence under current Nasdaq listing standards and SEC rules and regulations. Our

Board of Directors has determined that Mr. Bate, Mr. Callori and Mr. Kishbauch are independent as independence is currently defined in applicable Nasdaq listing standards.

#### *Science and Technology Committee*

The members of the science and technology committee are Dr. Violin and Dr. Beck. Dr. Violin was appointed to the science and technology committee in January 2021 upon his joining our Board of Directors in connection with the Quellis Acquisition. During 2020 and until the Quellis Acquisition, the members of the committee were Dr. Burt Adelman and Dr. Beck. Dr. Adelman resigned from the Board in connection with the Quellis Acquisition. The science and technology committee met twice during 2020. The science and technology committee's responsibilities include:

- reviewing, evaluating, and advising the Board of Directors and management regarding the long-term strategic goals and objectives and the direction of our research and development programs;
- monitoring and evaluating trends in research and development, and recommending to the Board of Directors and management emerging technologies for building our technological strength;
- recommending approaches to acquiring and maintaining technology positions;
- regularly reviewing our research and development pipeline; and
- assisting the Board of Directors with its oversight responsibility for enterprise risk management in areas affecting our research and development.

#### **Code of Business Conduct and Ethics**

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted on our website, [www.catabasis.com](http://www.catabasis.com), a current copy of the code and all disclosures that are required by law or Nasdaq stock market listing standards concerning any amendments to, or waivers from, any provision of the code. Information contained on the website is not incorporated by reference in, or considered part of, this proxy statement.

#### **Anti-Hedging Policy**

We have adopted an insider trading policy that, among other things, expressly prohibits all of our employees, including our named executive officers, as well as our directors, and certain of their family members and related entities, from engaging in short sales of our securities, including short sales "against the box"; purchases or sales of puts, calls or other derivative securities based on our securities; and purchases of financial instruments (including prepaid variable forward contracts, equity swaps, collars and exchange funds) that are designed to hedge or offset any decrease in the market value of our securities.

#### **Director Nomination Process**

Our nominating and corporate governance committee is responsible for identifying individuals qualified to serve as directors, consistent with criteria approved by our Board of Directors, and recommending the persons to be nominated for election as directors.

#### *Director Qualifications*

In evaluating director nominees, the nominating and corporate governance committee will consider, among other things, the following factors:

- reputation for integrity, honesty and adherence to high ethical standards;
- demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to the current and long-term objectives of our company;
- commitment to understand our company and its industry;

- interest and ability to understand the sometimes conflicting interests of the various constituencies of our company, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders; and
- diversity of expertise and experience in substantive matters pertaining to our business relative to other members of our Board of Directors.

The nominating and corporate governance committee's goal is to assemble a Board of Directors that brings to the company a variety of perspectives and skills derived from high quality business and professional experience. Moreover, the nominating and corporate governance committee believes that the background and qualifications of the Board of Directors, considered as a group, should provide a significant mix of experience, knowledge and abilities that will allow the Board of Directors to fulfill its responsibilities. Nominees are not discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law.

The nominating and corporate governance committee has not adopted a formal policy with respect to a fixed set of specific minimum qualifications for its candidates for membership on the Board of Directors. The committee may consider such other facts, including, without limitation, diversity, as it may deem are in the best interests of our company and its stockholders. The committee further believes it is appropriate for at least one member of our Board of Directors to meet the criteria for an "audit committee financial expert" as that phrase is defined under the regulations promulgated by the SEC, and that a majority of the members of our Board of Directors be independent as required under the Nasdaq qualification standards. The committee believes it is appropriate for our chief executive officer to serve as a member of our Board of Directors. Our directors' performance and qualification criteria are reviewed periodically by the nominating and corporate governance committee.

#### *Identification and Evaluation of Nominees for Directors*

The nominating and corporate governance committee identifies nominees for director by first evaluating the current members of our Board of Directors willing to continue in service. Current members with qualifications and skills that are consistent with the nominating and corporate governance committee's criteria for board of director service and who are willing to continue in service are considered for re-nomination, balancing the value of continuity of service by existing members of our Board of Directors with that of obtaining a new perspective or expertise.

If any member of our Board of Directors does not wish to continue in service or if our Board of Directors decides not to re-nominate a member for re-election, the nominating and corporate governance committee identifies a new nominee that meets the criteria above. The committee generally inquires of our Board of Directors and members of management for their recommendations. The committee may also review the composition and qualification of the boards of directors of our competitors and may seek input from industry experts or analysts. The nominating and corporate governance committee reviews the qualifications, experience and background of suggested candidates. Final candidates, if other than our current directors, would be interviewed by the members of the nominating and corporate governance committee and by certain of our other independent directors and executive management. In making its determinations, the nominating and corporate governance committee evaluates each individual in the context of our Board of Directors as a whole, with the objective of assembling a group that can best contribute to the success of our company and represent stockholder interests through the exercise of sound judgment. After review and deliberation of all feedback and data, the nominating and corporate governance committee makes its recommendation to our Board of Directors. The nominating and corporate governance committee has previously used, and may in the future use, a third-party search firm in those situations where particular qualifications are required or where existing contacts are not sufficient to identify an appropriate candidate.

In connection with the Quellis Acquisition discussed below under "Proposal No. 2—Approval of Series X Preferred Stock Conversion Proposal—Descriptions of the Transactions," we negotiated with Quellis regarding the composition of our Board of Directors following the Quellis Acquisition and agreed that, upon the closing of the Quellis Acquisition, two new directors from Quellis would be added to our Board of Directors. Our nominating and corporate governance committee discussed the potential candidates

proposed by Quellis, Dr. Violin and Mr. Callori, and their qualifications, experience and background and recommended to our Board of Directors that Dr. Violin and Mr. Callori be appointed to the Board.

We have not received director candidate recommendations from our stockholders. However, any recommendations received from stockholders will be evaluated by following substantially the same process, and applying the same criteria, used to evaluate potential nominees suggested by members of our Board of Directors, management or other parties.

Under our bylaws, stockholders wishing to suggest a candidate for director should write to our corporate secretary. In order to give the nominating and corporate governance committee sufficient time to evaluate a recommended candidate and/or include the candidate in our proxy statement for the 2022 annual meeting, the recommendation should be received by our corporate secretary at our principal executive offices in accordance with our procedures detailed in the section below entitled “Stockholder Proposals.” Such submissions must state the nominee’s name, together with appropriate biographical information and background materials, and information with respect to the stockholder or group of stockholders making the recommendation, including the number of shares of common stock owned by such stockholder or group of stockholders, as well as other information required by our bylaws. We may require any proposed nominee to furnish such other information as we may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director or that could be material to a reasonable stockholder’s understanding of the independence, or lack thereof, of such proposed nominee.

#### **Director Attendance at Annual Meetings**

Under our corporate governance guidelines, members of our Board of Directors are responsible for attending our Annual Meeting, and we encourage all of our directors to attend. In 2020, as a result of the COVID-19 pandemic and the implementation of restrictions on gatherings of more than ten people that had been implemented by the Governor of Massachusetts, only Dr. Milne attended the annual meeting in person. All of our other then-serving directors joined by teleconference.

#### **Communications with Our Board of Directors**

Stockholders seeking to communicate with our Board of Directors should submit their written comments to Catabasis Pharmaceuticals, Inc., 100 High Street, 28<sup>th</sup> Floor, Boston, MA 02110, Attention: Corporate Secretary. The corporate secretary will forward such communications to each member of our Board of Directors; provided that, if, in the opinion of our corporate secretary, it would be inappropriate to send a particular stockholder communication to a specific director, such communication will only be sent to the remaining directors (subject to the remaining directors concurring with such opinion).

#### **Director Compensation**

The following table sets forth information regarding compensation earned by our non-employee directors during 2020. All of the directors listed below served as directors for all of 2020. Dr. Adelman resigned from the Board as of January 28, 2021 in connection with the Quellis Acquisition. Dr. Violin and Mr. Callori joined the Board as of January 28, 2021 in connection with the Quellis Acquisition and therefore did not receive any compensation in 2020 and are excluded from the table. Dr. Milne, our President and Chief Executive Officer, is excluded from the table because she is an executive officer and we do not provide any compensation to Dr. Milne for her service as a director. Dr. Milne’s compensation as an executive officer is set forth below under “Executive Compensation.”

<u>Name</u>	<u>Fees Earned or Paid In Cash (\$)</u>	<u>Option Awards \$(1)</u>	<u>Total (\$)</u>
Kenneth Bate	85,000	29,443	114,443
Burt Adelman, M.D.	45,000	29,443	74,443
Joanne Beck	45,000	29,443	74,443
Hugh Cole	42,500	29,443	71,943
Michael Kishbauch	48,750	29,443	78,193
Gregg Lapointe	55,000	29,443	84,443

(1) The amounts included in the “Option Awards” column reflect the aggregate grant date fair value of awards granted during 2020 calculated in accordance with Financial Accounting Standards Board, or FASB, Accounting Standard Codification, or ASC, Topic 718. Assumptions used in the calculation of these amounts are included in Note 8 to the consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 previously filed with the SEC. As of December 31, 2020:

- Mr. Bate held stock options to purchase an aggregate of 19,797 shares of common stock, 12,297 shares of which were vested as of December 31, 2020; 7,500 of the shares are scheduled to vest on June 11, 2021.
- Dr. Adelman held stock options to purchase an aggregate of 18,350 shares of common stock, 10,850 shares of which were vested as of December 31, 2020. As of Dr. Adelman’s departure from the Board on January 28, 2021, 7,500 options were cancelled and the remaining options will be forfeited if not exercised on or prior to April 28, 2021.
- Dr. Beck held stock options to purchase an aggregate of 22,500 shares of common stock, 5,000 shares of which were vested as of December 31, 2020; 5,000 of the shares vested on February 13, 2021; 7,500 are scheduled to vest on June 11, 2021; and 5,000 of the shares are scheduled to vest on February 13, 2022.
- Mr. Cole held stock options to purchase an aggregate of 22,500 shares of common stock, 5,000 shares of which were vested as of December 31, 2020; 7,500 of the shares are scheduled to vest on June 11, 2021; 5,000 of the shares are scheduled to vest on July 26, 2021; and 5,000 of the shares are scheduled to vest on July 26, 2022.
- Mr. Kishbauch held stock options to purchase an aggregate of 18,350 shares of common stock, 10,850 shares of which were vested as of December 31, 2020; 7,500 of the shares are scheduled to vest on June 11, 2021.
- Mr. Lapointe held stock options to purchase an aggregate of 22,500 shares of common stock, 5,000 shares of which were vested as of December 31, 2020; 934 of the shares vested on January 3, 2021; 4,066 of the shares vested on February 13, 2021; 7,500 of the shares are scheduled to vest on June 11, 2021; 933 of the shares are scheduled to vest on January 3, 2022; and 4,067 of the shares are scheduled to vest on February 13, 2022.

Under our director compensation program, we pay our non-employee directors a cash retainer for service on the Board of Directors and for service on each committee on which the director is a member. The Chair of the Board of Directors and the chair of each committee receive higher retainers for such service. These fees are payable in arrears in four equal quarterly installments on the last day of each quarter, provided that the amount of such payment is prorated for any portion of such quarter that the director is not serving on our Board of Directors. In 2020, the fees paid to non-employee directors for service on the

Board of Directors and for service on each committee of the Board of Directors on which the director is a member were as follows:

	Member Annual Fee	Chair Incremental Annual Fee
Board of Directors	\$35,000	\$35,000
Audit Committee	\$ 7,500	\$12,500
Compensation Committee	\$ 5,000	\$ 5,000
Nominating and Corporate Governance Committee	\$ 3,750	\$ 3,750
Science and Technology Committee	\$ 5,000	\$ 5,000

We also reimburse our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending our Board of Directors and committee meetings.

In addition, we make periodic equity grants to our non-employee directors. Under our director compensation program as in effect in 2020 and in 2021 until it was amended, as described below, each new non-employee director elected to our Board of Directors was entitled to receive an option to purchase 15,000 shares of our common stock, with such option vesting in equal annual installments over a three-year period from the date of grant, subject to the director's continued service as a director. Further, on the date of the first Board of Directors meeting held after each annual meeting of stockholders, each non-employee director that has served on our Board of Directors for at least six months was entitled to receive an option to purchase 7,500 shares of our common stock, with such option vesting in full after a one-year period from the date of grant, subject to the director's continued service as a director. The exercise price of all options granted to directors is equal the fair market value of our common stock on the date of grant. Options granted to non-employee directors become exercisable in full upon a change in control of Catabasis.

In connection with the review and assessment of our equity program for employees following the Quellis Acquisition and February 2021 Financing, as described in Proposal No. 4, our Board of Directors, in consultation with Aon, amended our director compensation program, to increase the annual stock option grants to non-employee directors that have served on our Board of Directors for at least six months from 7,500 options to 50,000 options and to increase the initial appointment stock option grants to non-employee directors from 15,000 options to 100,000 options. In addition, and for similar reasons that our Board of Directors granted new hire level awards to our employees and, subject to stockholder approval of the Plan Increase Proposal or approval of a comparable increase in shares available under the 2015 Plan within twelve months of the grant date, our executive officers and certain other officers following the Quellis Acquisition and February 2021 Financing, as described in Proposal No. 4, our Board of Directors determined that for 2021 only and subject to stockholder approval of the Plan Increase Proposal, each non-employee director will receive, in lieu of an annual grant of options, an initial appointment level stock option grant. As a result, subject to stockholder approval of the Plan Increase Proposal, each of our non-employee directors will receive a stock option grant to purchase 100,000 shares as of the Annual Meeting, with the exception of Dr. Violin and Mr. Callori, who will each receive a stock option to purchase 85,000 shares in light of each of them having received initial appointment grants of options to purchase 15,000 shares in connection with their appointments to our Board of Directors in January 2021. These 2021 option grants would, as with initial appointment grants, vest in equal annual installments over a three-year period from the date of grant, subject to the director's continued service.

Our director compensation program is intended to provide a total compensation package that enables us to attract and retain qualified and experienced individuals to serve as directors and to align our directors' interests with those of our stockholders.



## EXECUTIVE OFFICERS

The following table sets forth information regarding our executive officers:

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
Jill Milne, Ph. D.	53	President and Chief Executive Officer, Director
Noah Clauser	48	Chief Financial Officer
Joanne Donovan, M.D., Ph. D. <sup>(1)</sup>	64	Chief Medical Officer
Benjamin Harshbarger	52	General Counsel
Andrew Nichols, Ph. D.	60	Chief Scientific Officer
Andrew Komjathy	58	Chief Commercial Officer

(1) Dr. Donovan has resigned as our Chief Medical Officer effective as of April 23, 2021.

The biography of Dr. Milne can be found under “Members of the Board of Directors Continuing in Office”

**Noah Clauser** has served as our Chief Financial Officer since September 2020. Previously, he served as our Vice President, Finance leading our finance and operations functions since August 2017. Mr. Clauser served as our Senior Director, Finance and Controller from January 2016 to July 2017, and as Controller from April 2011 to December 2015. Prior to joining Catabasis, Mr. Clauser was at Impress Software, an enterprise software company, where he served as Accounting Manager from 2005 to 2009. Mr. Clauser is a licensed CPA in Massachusetts and holds an M.S. in Accounting and a B.S. in Management from the University of Massachusetts at Boston.

**Joanne Donovan, M.D., Ph.D.**, has served as our Chief Medical Officer since July 2011. Since 1989, she has worked as a staff physician at the VA Boston Healthcare System, where she was formerly Chief of Gastroenterology. Dr. Donovan has held an appointment at Harvard Medical School since 1990, most recently as associate clinical professor of medicine. From 1998 to July 2011, Dr. Donovan served in positions of increasing responsibility, ultimately as vice president of clinical development, at Genzyme, a biotechnology company, which she joined through its acquisition of GelTex. Dr. Donovan holds a Ph.D. in medical engineering and medical physics from the Massachusetts Institute of Technology, an M.D. from Harvard Medical School and an S.B. from the Massachusetts Institute of Technology. She completed residency training in internal medicine and a fellowship in gastroenterology at the Brigham and Women’s Hospital.

**Benjamin Harshbarger** has served as our General Counsel since June 2020. Prior to joining Catabasis, Mr. Harshbarger served as Interim Chief Executive Officer and General Counsel at Novilion Therapeutics Inc. from November 2018 to December 2019. Mr. Harshbarger was General Counsel of Aegerion Pharmaceuticals, Inc. and subsequently Novilion Therapeutics following their merger from August 2016 to November 2018, and Acting General Counsel of Aegerion Pharmaceuticals from September 2015 to July 2016. Prior to these roles, he served as the Vice President, EMEA Legal Counsel and the Vice President, Deputy General Counsel at Aegerion from 2012 to 2015. Mr. Harshbarger received his J.D. from Boston College Law School, and his B.A. in Political Science from the University of Richmond.

**Andrew Nichols, Ph.D.**, has served as our Chief Scientific Officer since October 2016. Previously, he served as our Senior Vice President, Research and Development from February 2014 to October 2016. From October 2013 to February 2014, Dr. Nichols was Associate Vice President, Cardiometabolic Diseases at Merck Research Labs, a pharmaceutical research company, leading drug discovery and early clinical development programs. Dr. Nichols was also Associate Vice President/Executive Director, In Vivo Pharmacology at Merck Research Labs from August 2010 to October 2013, and Executive Director, In Vivo Sciences at Merck Research Labs from August 2009 to August 2010. Prior to Merck, Dr. Nichols was Vice President of Preclinical Research at Zafgen, Vice President of Research at Alinea, Vice President of Drug Discovery Project Leadership at Millennium and Director of the Alliance Management Group at SmithKline Beecham. He holds an M. Phil. and Ph.D. in Cardiovascular Pharmacology from the University of Cambridge, England and a B.Sc. in Pharmacology from the University of Leeds, England.

**Andrew Komjathy** has served as our Chief Commercial Officer since September 2019. Previously, Mr. Komjathy was the Vice President, Commercial Sales at Alkermes, Inc., a publicly held pharmaceutical company, from May 2014 to November 2018. From 2012 to 2014, he was the Vice President, Sales for the U.S. Multiple Sclerosis Business Unit at Genzyme, a publicly held pharmaceutical company. From 2005 to 2012, Mr. Komjathy held three Vice President positions at Shire Human Genetic Therapies, initially as Vice President and General Manager, Commercial Operations in the North American and Asia-Pacific regions, followed by Vice President, Global Franchise Leader for Fabry/Gaucher in Switzerland, and ultimately as Vice President, Commercial Operations. From 1996 to 2005, Mr. Komjathy held positions of increasing responsibility at Biogen. Mr. Komjathy holds an M.B.A. from New York University Stern School of Business and his B.S. in Business Administration from Bucknell University.

## EXECUTIVE COMPENSATION

This section describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers, or NEOs. Our NEOs for 2020 are Jill C. Milne, Joanne M. Donovan, and Andrew Nichols. This section also provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

### 2020 Summary Compensation Table

The following table sets forth information regarding compensation earned in 2020 and 2019 by our NEOs.

Name and Principal Position	Year	Salary (\$)	Bonus \$(1)	Option Awards \$(2)	All Other Compensation \$(3)	Total (\$)
Jill C. Milne, Ph.D. <i>President and Chief Executive Officer</i>	2020	519,925	194,972	535,341	2,063	1,252,301
	2019	500,891	231,662	298,253	1,991	1,032,797
Joanne M. Donovan, M.D., Ph.D. <sup>(4)</sup> <i>Chief Medical Officer</i>	2020	436,497	192,774	214,136	2,222	845,629
	2019	423,783	168,454	119,301	2,172	713,710
Andrew Nichols, Ph.D. <i>Chief Scientific Officer</i>	2020	378,958	163,161	214,136	2,116	758,371
	2019	367,920	142,569	119,301	2,155	631,945

- (1) The amounts reported in the “Bonus” column represent discretionary cash bonuses awarded to our NEOs.
- (2) The amounts reported in the “Option Awards” column reflect the aggregate grant date fair value of share-based compensation awarded during the year computed in accordance with the provisions of FASB ASC Topic 718. See Note 8 to the consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 previously filed with the SEC.
- (3) The amounts reported in the “All Other Compensation” column reflect, for each NEO, the cost to us of life insurance premiums paid for the NEO.
- (4) Dr. Donovan has resigned as our Chief Medical Officer effective as of April 23, 2021.

### Narrative to Summary Compensation Table

We review compensation annually for all employees, including our executives. In setting executive base salaries and bonuses and granting equity incentive awards, we consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders, and a long-term commitment to our company. In setting executive base salaries and bonus targets, we generally target the 50<sup>th</sup> percentile of our peer group companies and, for equity incentive awards, which to date have only consisted of stock options, we generally target the 60<sup>th</sup> percentile of our peer group companies. We do not target a specific mix of compensation among base salary, bonus or equity incentives.

Our Chief Executive Officer typically proposes base salary, cash bonuses for the prior year, target bonuses for the coming year, and equity incentive compensation for members of our executive team (excluding herself) to the compensation committee. Her proposals are based on our pay philosophy and methodology and in-line with executive compensation for similarly situated executives at our peer group companies. Our compensation committee then typically reviews and discusses the proposals with our Chief Executive Officer for all executives other than the Chief Executive Officer, and approves the base salary, cash bonuses for the prior year, target bonuses for the coming year and equity incentive compensation for such executives. For our Chief Executive Officer, the compensation committee typically reviews and discusses a proposed base salary, cash bonus for the prior year, target bonus for the coming year and equity incentive

compensation based upon data presented by the compensation consultant, and presents, discusses and ultimately makes a recommendation to our Board of Directors with respect to each element of her compensation. Our Board of Directors is responsible for the approval of the compensation of our Chief Executive Officer. The Chief Executive Officer is not present during voting or deliberations regarding her compensation by the compensation committee or the Board of Directors. Our compensation committee engaged Aon as its independent compensation consultant, to review our executive compensation peer group and program design and assess our executives' 2020 compensation, including the compensation for our NEOs as described in the table above and this accompanying narrative, relative to our peer group companies as approved by the compensation committee in December 2019. See "Corporate Governance—Committees of the Board of Directors—Compensation Committee" for more information about the engagement of Aon by the compensation committee.

*Base salary.* In 2020, we paid annual base salaries to Dr. Milne, Dr. Donovan and Dr. Nichols in the amounts of \$519,925, \$436,497, and \$378,958, respectively. These 2020 annual base salaries reflected a market-based merit increase from 2019 base salaries of 3.8% for Dr. Milne and 3.0% for each of Dr. Donovan and Dr. Nichols. These base salaries were determined using a competitive assessment of similarly situated executives at our peer companies to make them competitive with the 50<sup>th</sup> percentile, as well as to address customary annual base salary increases and to recognize their individual performance. We use base salaries to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our NEOs. None of our NEOs is currently party to an employment agreement or other agreement or arrangement that provides for automatic or scheduled increases in base salary.

*Bonuses.* Our Board of Directors, for our Chief Executive Officer, and our compensation committee, for our other NEOs, establish annual bonus targets and, may, in their discretion, award bonuses to our NEOs from time to time. Annual bonus targets for our NEOs consist of a percentage of annual base salary, are based on target bonus percentages for similar executives at our peer companies and are typically established to make these percentages competitive with the 50<sup>th</sup> percentile of our peer companies. For 2020, our Board of Directors approved the target bonuses for all of our NEOs. The approved target bonuses for 2020 were 50%, 40% and 40% for Drs. Milne, Donovan and Nichols, respectively. In addition, our Board of Directors approves pre-specified operational and strategic annual corporate goals that will be considered by our Board of Directors and compensation committee in determining the bonuses to be paid. For the determination of our Chief Executive Officer's annual bonus, our Board of Directors typically considers only our achievement of corporate goals, and for the determination of annual bonuses for our other NEOs, our compensation committee typically considers both achievement of corporate goals and achievement of individual goals.

The process for determining bonus awards is typically initiated by a review by our Chief Executive Officer with the compensation committee of achievement against prior year corporate goals and individual goals. Our compensation committee then makes the final determination of the amount of such bonus awards for Dr. Donovan and Dr. Nichols, and makes a recommendation to the Board of Directors regarding the amount of such bonus award for Dr. Milne. Our Board of Directors makes the final decision about the amount of the bonus award for Dr. Milne. With respect to 2020, we paid annual bonuses to Drs. Milne, Donovan and Nichols, in the amounts of \$194,972, \$192,774, and \$163,161, respectively. For Dr. Milne, her bonus payout was based solely on achievement against our 2020 corporate goals. For Drs. Donovan and Nichols, their bonuses were based on our achievement against corporate goals, their respective achievement against their individual goals, and their significant contributions to our exploration and evaluation of strategic options in November and December 2020 which led to the Quellis Acquisition and February 2021 Financing.

*Equity incentives.* Although we do not have a formal policy with respect to the grant of equity incentive awards to our executive officers, or any formal equity ownership guidelines applicable to them, we believe that equity grants, which we have to date made in the form of stock option grants, provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, we believe that equity grants with time-based vesting promote executive retention because such vesting incentivizes our executive officers to remain in our employment during the vesting period. Accordingly, we typically grant stock option awards to each executive officer and our other employees both at the start of employment and on annual basis. We also

typically grant stock options awards in connection with promotions and from time to time in connection with significant achievements. For grants in connection with initial employment, vesting begins on the initial date of employment and for other grants, vesting begins on the grant date. Time vested stock option grants to our executives and other employees typically vest 25% on the first anniversary of grant or, in the case of new hire grants, the initial employment date, if earlier, and 2.0833% per month thereafter, through the fourth anniversary of the vesting commencement date, and have a term of 10 years from the grant date. The exercise price of all options is equal to the fair market value of our common stock on the date of grant.

Equity awards are typically approved by the compensation committee for our NEOs other than our Chief Executive Officer, and by our Board of Directors, based on the recommendation of the compensation committee, for our Chief Executive Officer. In 2020, our Board of Directors granted options to purchase 150,000, 60,000 and 60,000 shares of our common stock to Dr. Milne, Dr. Donovan and Dr. Nichols, respectively, as part of a review of their overall annual compensation. These stock option grants were determined using a competitive assessment of similarly situated executives at our peer companies to make them competitive with the 60<sup>th</sup> percentile.

**Outstanding Equity Awards at 2020 Fiscal Year End Table**

The following table sets forth information regarding outstanding stock options held by our NEOs as of December 31, 2020.

Name	Option Awards			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Jill C. Milne, Ph.D.	8,427	—	\$ 16.70	2/28/2021
	2,229	—	\$ 23.10	12/17/2022
	3,247	—	\$ 23.10	12/17/2022
	2,860	—	\$ 23.10	4/16/2023
	5,836	—	\$ 68.10	3/18/2024
	933	—	\$110.50	3/25/2025
	16,000	—	\$140.50	7/16/2025
	10,300	—	\$ 45.70	2/10/2026
	4,500	—	\$ 43.10	9/7/2026
	19,168	832(1)	\$ 12.40	2/8/2027
	16,292	6,708(2)	\$ 12.80	2/7/2028
	23,000	—	\$ 7.10	9/6/2028
	45,833	54,167(3)	\$ 4.39	2/12/2029
—	150,000(4)	\$ 5.32	2/11/2030	
Joanne M. Donovan, M.D., Ph.D.	2,723	—	\$ 19.30	9/6/2021
	2,458	—	\$ 23.10	12/17/2022
	720	—	\$ 23.10	12/17/2022
	1,049	—	\$ 23.10	12/17/2022
	1,430	—	\$ 23.10	4/16/2023
	2,529	—	\$ 68.10	3/18/2024
	466	—	\$110.50	3/25/2025
	6,600	—	\$ 45.70	2/10/2026
	4,500	—	\$ 43.10	9/7/2026
	9,584	416(1)	\$ 12.40	2/8/2027
	7,088	2,912(2)	\$ 12.80	2/7/2028
15,000	—	\$ 7.10	9/6/2028	

Name	Option Awards			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date
	18,333	21,667(3)	\$ 4.39	2/12/2029
	—	60,000(4)	\$ 5.32	2/11/2030
Andrew Nichols, Ph.D.	5,836	—	\$ 68.10	3/18/2024
	272	—	\$ 110.50	3/25/2025
	778	—	\$ 110.50	4/29/2025
	2,600	—	\$ 45.70	2/10/2026
	4,000	—	\$ 43.10	9/7/2026
	1,300	—	\$ 57.90	10/2/2026
	9,584	416(1)	\$ 12.40	2/8/2027
	7,088	2,912(2)	\$ 12.80	2/7/2028
	15,000	—	\$ 7.10	9/6/2028
	18,333	21,667(3)	\$ 4.39	2/12/2029
	—	60,000(4)	\$ 5.32	2/11/2030

- (1) The unvested awards vested in full as of February 9, 2021.
- (2) The unvested awards are scheduled to vest in equal monthly installments through February 8, 2022.
- (3) The unvested awards are scheduled to vest in equal monthly installments through February 12, 2023.
- (4) 25% of the unvested awards subsequently vested on February 13, 2021. The remaining unvested awards will vest in equal monthly installments through February 13, 2024.

#### ***Employment Agreements, Severance and Change in Control Arrangements***

##### **Employment Agreements with NEOs**

We have entered into an employment agreement with Dr. Milne, dated as of April 7, 2010. The employment agreement confirms Dr. Milne's title, compensation arrangements and eligibility for benefits made available to employees generally. The employment agreement with Dr. Milne provides that she is eligible to receive an annual cash bonus, as determined by the Board of Directors in its sole discretion, based on a percentage of her base salary, which will be subject to adjustment from time to time by the Board of Directors in its sole discretion. The Board of Directors has approved for 2021 a target cash bonus (expressed as a percentage of base salary) of up to 50% for Dr. Milne based on its assessment of our performance against established annual goals.

The Board of Directors has approved for 2021 a target cash bonus of up to 40% of annual base salary for each of Dr. Donovan and for Dr. Nichols, as determined in the sole discretion of the Board of Directors, based on its assessment of their respective performance and that of Catabasis against established annual goals.

Each of Drs. Milne, Donovan and Nichols is an employee at will and is entitled to certain benefits upon termination pursuant to our Amended and Restated Severance Benefits Plan, or the Severance Plan, which was adopted by the Board of Directors in April 2016 and amended and restated in October 2020 by the compensation committee, as further described below.

##### **Severance Plan**

The Severance Plan provides our current executive officers, other employees holding the title of vice president or above, as designated by the compensation committee, and future employees holding the title of vice president or above, as designated by the compensation committee (collectively, "Covered Employees"),

certain severance benefits upon a termination without cause (as defined in the Severance Plan) or a resignation for good reason (as defined in the Severance Plan), including in each case within one year following a change in control (as defined in the Severance Plan) (each, a “Covered Termination”). Pursuant to the Severance Plan, each Covered Employee who is subject to a Covered Termination is entitled to:

- continuation of such Covered Employee’s monthly base salary (as defined in the Severance Plan) for a period ranging from six months to 18 months (the “Severance Period”) following such termination depending on the title/role of the Covered Employee and the type of Covered Termination;
- payment by Catabasis of a portion of the cost of COBRA continuation of benefits coverage for the Covered Employee and his or her applicable dependents for no longer than the Covered Employee’s applicable Severance Period or until the Covered Employee commences new employment and is eligible for new plan coverage, if sooner, subject to certain conditions set forth in the Severance Plan;
- any unpaid annual bonus in respect to any completed bonus period which has ended prior to the date of the Covered Employee’s Covered Termination and which the Board of Directors deems granted to the Covered Employee in its discretion pursuant to Catabasis’ contingent compensation program;
- in the case of the chief executive officer, a bonus amount equal to one-half of the average annual bonus paid to the chief executive officer over the three calendar years preceding the calendar year in which the Covered Termination occurs, which bonus will be prorated to reflect the number of days served in the calendar year in which such Covered Termination occurs; and
- in the case of a change in control termination, full vesting of any unvested equity awards.

Receipt of any severance benefits under the Severance Plan requires that the Covered Employee: (a) comply with the provisions of any applicable noncompetition, non-solicitation, and other obligations to us; and (b) execute and deliver a suitable waiver and release under which the Covered Employee releases and discharges us and our affiliates from and on account of any and all claims that relate to or arise out of the employment relationship between us and the Covered Employee, which release will become binding within 60 days following the Covered Employee’s termination of employment. If a Covered Employee dies following a Covered Termination but before such Covered Employee has received all of the severance benefits to which such Covered Employee is entitled under the Severance Plan, the remaining payments will be made to the Covered Employee’s designated beneficiary or estate.

The Severance Plan provides that the following employees will not be eligible for severance benefits, except to the extent specifically determined otherwise by the Severance Plan’s administrator:

- an employee who is terminated for cause (as defined in the Severance Plan);
- an employee who retires, terminates employment as a result of an inability to perform his or her duties due to physical or mental disability or dies;
- an employee who voluntarily terminates his or her employment, except in the case of a Covered Termination for good reason (as defined in the Severance Plan);
- an employee who is employed for a specific period of time in accordance with the terms of a written employment agreement; and
- an employee who promptly becomes employed by another member of the controlled group of entities of which Catabasis (or its successor in the change in control (as defined in the Severance Plan)) is a member as defined in Sections 414(b) and (c) of the Internal Revenue Code of 1986, as amended (the “Code”).

The Severance Plan provides for recoupment of severance benefits under specified circumstances if the Covered Employee fails to comply with the terms of the Severance Plan.

The Severance Plan supersedes (i) existing severance plans and separation policies applying to Covered Employees with respect to any termination that would constitute a Covered Termination and (ii) the provisions of any agreements between any Covered Employee and us that provide for severance benefits.

The following table summarizes the schedule of severance payments our NEOs would receive under the Severance Plan, assuming a qualifying termination occurred on December 31, 2020.

<u>Name</u>	<u>Cash Severance \$(1)</u>	<u>Bonus \$(2)</u>	<u>COBRA Continuation \$(3)</u>	<u>Value of Accelerated Vesting of Equity Awards \$(4)</u>	<u>Total \$</u>
<i>Jill C. Milne, Ph.D.</i>					
Termination without cause or upon resignation with good reason	519,925	106,816	21,168	—	647,909
Termination upon a change in control	779,887	106,816	31,752	—	918,455
<i>Joanne M. Donovan, M.D., Ph.D.</i>					
Termination without cause or upon resignation with good reason	436,497	—	21,168	—	457,665
Termination upon a change in control	436,497	—	21,168	—	457,665
<i>Andrew Nichols, Ph.D.</i>					
Termination without cause or upon resignation with good reason	378,958	—	21,168	—	400,126
Termination upon a change in control	378,958	—	21,168	—	400,126

- (1) These amounts represent, in the case of Dr. Milne, 12 months' base salary for a termination without cause or resignation with good reason and 18 months' base salary for a termination upon a change of control; and, in the case of Dr. Donovan and Dr. Nichols, 12 months' base salary; each at the rate in effect immediately prior to the executive's termination of employment.
- (2) These amounts represent 50% of the average performance bonus received by Dr. Milne for the three most recently completed years.
- (3) These amounts represent paid health coverage for 12 months and, in the case of Dr. Milne for a change in control termination, 18 months' paid health coverage.
- (4) The values of accelerated vesting of equity awards included in the table above are based on the intrinsic values of such unvested awards on December 31, 2020 (i.e., the difference between the closing price of our common stock on the Nasdaq Global Market on that date and the exercise price multiplied by the number of shares for which vesting would have been accelerated). The closing price of our common stock on December 31, 2020 was below the exercise price of all equity awards held by our NEOs.

We have also entered into employee confidentiality, non-competition and proprietary information agreements with each of our NEOs. Under the employee confidentiality, non-competition and proprietary information agreements, each NEO has agreed (1) not to compete with us during his or her employment and for a period of 18 months after the termination of his or her employment, (2) not to solicit our employees during his or her employment and for a period of 18 months after the termination of his or her employment, (3) to protect our confidential and proprietary information and (4) to assign to us related intellectual property developed during the course of his or her employment.

#### **401(k) Retirement Plan**

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Code. In general, all of our employees are eligible to participate, beginning on the first day of the month following commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit, equal to \$19,500 in 2020, and have the amount of the reduction contributed to the 401(k) plan. Participants over the age of 50 are entitled to an additional catch-up contribution up to the statutorily prescribed limit, equal to \$6,500 in 2020.



## PROPOSAL NO. 2—APPROVAL OF SERIES X PREFERRED STOCK CONVERSION PROPOSAL

### Description of the Transactions

#### *Acquisition of Quellis*

On January 28, 2021, we acquired Quellis Biosciences, Inc., a Delaware corporation (“Quellis”), pursuant to an Agreement and Plan of Merger (the “Quellis Acquisition Agreement”), after which Quellis became our wholly owned subsidiary and was merged into our wholly owned subsidiary Quellis Biosciences, LLC (the “Quellis Acquisition”). Following the Quellis Acquisition, we shifted our operating focus to the pre-clinical and clinical development of Quellis’ pre-clinical product, QLS-215, as a potential treatment for a rare disease, Hereditary Angioedema (“HAE”), with a high unmet medical need. We continue to maintain our corporate headquarters in Boston, Massachusetts.

Quellis was incorporated in November 2017. Prior to our acquisition, Quellis had been operating largely as a virtual company, had no employees, never had any revenues, had one asset in pre-clinical development (QLS-215) and an earlier stage undisclosed program. Quellis did not have an adequate workforce or an organization with capabilities and processes to advance QLS-215 into clinical development. Given Quellis’s short operating history and highly limited research and pre-clinical development operations, we do not believe that the financial information set forth in Items 12 and 14 of Schedule 14A, with respect to Quellis, is material for our stockholders to exercise their prudent judgment with respect to any of the proposals being considered at the Annual Meeting. This information is therefore not included in this proxy statement. As the transaction does not qualify as a business combination, it will be accounted for as an asset acquisition. We accounted for this acquisition as an asset acquisition as substantially all of the fair value of the non-monetary assets acquired was concentrated in a single identifiable asset, QLS-215 and its intellectual property.

Under the terms of the Quellis Acquisition Agreement, we issued to the stockholders of Quellis 3,332,669 shares of common stock and 50,504 shares of Series X Preferred Stock, which was a newly designated series of preferred stock that is intended to have economic rights equivalent to the common stock, but with only limited voting rights. Additionally, we reserved 332,494 shares of common stock for issuance pursuant to options assumed in the Quellis Acquisition and 185,136 shares of common stock and 2,805 shares of Series X Preferred Stock for issuance upon the exercise of a warrant assumed in the Quellis Acquisition. The rights of the Series X Preferred Stock are set forth in a Certificate of Designation of Preferences, Rights and Limitations that we filed with the Secretary of State of the State of Delaware (the “Certificate of Designation”). Please see “—Description of the Series X Preferred Stock” below for a complete description of the Certificate of Designation and the rights of the Series X Preferred Stock.

In connection with the execution of the Quellis Acquisition Agreement, we and Quellis entered into stockholder support agreements (the “Support Agreements”) with our directors and certain officers. The Support Agreements provide that, among other things, each of the stockholders has agreed to vote or cause to be voted all of the shares of common stock owned by such stockholder in favor of this Proposal No. 2.

#### *Financing Transaction*

Concurrent with the Quellis Acquisition, we entered into a Securities Purchase Agreement (the “Purchase Agreement”) with certain institutional and accredited investors (the “Investors”), pursuant to which we issued and sold 35,573 shares of Series X Preferred Stock for an aggregate purchase price of approximately \$110.0 million (the “February 2021 Financing” and collectively with the Quellis Acquisition, the “Transactions”). On an as-converted basis, the shares were sold at a price of approximately \$3.09 per common share. Our closing price prior to announcing the Transactions was \$2.43. The February 2021 Financing was exempt from registration pursuant to Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder, as a transaction by an issuer not involving a public offering.

In connection with the February 2021 Financing, we entered into a Registration Rights Agreement (the “Registration Rights Agreement”) with the Investors. Pursuant to the Registration Rights Agreement, we filed a resale registration statement with the SEC. The Registration Rights Agreement also contains

customary terms, including an obligation to indemnify the Investors and certain affiliates from certain liabilities relating to any misstatements or omissions in the resale registration statement.

### ***Conversion of Preferred Stock***

Subject to stockholder approval of this Proposal No. 2, each share of Series X Preferred Stock will be convertible into 1,000 shares of common stock. If our stockholders have not approved the conversion of the Series X Preferred Stock into common stock by July 28, 2021 (six months after the closing of the Quellis Acquisition), then a holder of Series X Preferred Stock may require us to settle any conversion demand made thereafter in cash by delivering to the holder an amount of cash equal to the number of shares of our common stock underlying the holder's Series X Preferred Stock multiplied by the last reported closing sale price of our common stock on the Nasdaq Capital Market (or other applicable stock exchange) on the trading day on which the applicable notice of conversion is delivered to us.

### **Background and Reasons for the Transactions**

As part of its ongoing oversight of our business and affairs, our Board of Directors, with input from management, regularly reviews our operations and strategy, competitive position, prospects and opportunities with a view to maximizing stockholder value.

In late October 2020, we announced that our Phase 3 PolarisDMD trial of edasalonexent in Duchenne muscular dystrophy did not meet the primary endpoint, that the secondary endpoint timed function tests did not show statistically significant improvements and that, in light of the foregoing, we were stopping activities related to the development of edasalonexent and planned to work with external advisors to explore and evaluate strategic options.

In connection with the October 2020 announcement, our Board of Directors initiated a process to explore strategic options intended to maximize stockholder value. Our Board of Directors engaged a financial advisor to assist in the review and evaluation of strategic options, including an acquisition, merger, business combination, in-licensing or other strategic transaction.

As part of the process to explore strategic options, our financial advisor contacted 292 companies regarding a potential transaction with us and sent 72 process letters to such companies. We entered into confidentiality agreements with 40 of the companies, including Quellis on November 10, 2020. We received proposals from 39 of the companies, including a proposal received from Quellis on December 1, 2020 in which Quellis proposed that our company would have a deemed enterprise value of \$15 million and Quellis would have a deemed enterprise value of \$200 million, which, assuming closing net cash held by us of \$35 million, would have resulted in our pre-closing stockholders retaining approximately 15.4% of the combined company on an as-converted-to-common-stock basis and after giving effect to a proposed concurrent financing of \$75 million.

After reviewing the relative advantages and disadvantages of each of the proposals and engaging in due diligence and other discussions with several of the companies, our Board of Directors determined that an acquisition of Quellis offered the best reasonably available alternative for us and our stockholders. Following this determination by our Board of Directors, our senior management and our financial advisors engaged in expanded and more detailed discussions with Quellis.

Following negotiations with Quellis and approval by our Board of Directors, we entered into a non-binding term sheet with Quellis on December 23, 2020 in which the parties agreed that our company would have a deemed enterprise value of \$25 million and Quellis would have a deemed enterprise value of \$185 million, which, assuming closing net cash held by us of \$35.0 million, would have resulted in our pre-closing stockholders retaining approximately 24.5% of the combined company on an as-converted-to-common-stock basis and before giving effect to a proposed concurrent financing of no less than \$75 million.

To facilitate the completion of the parties' confirmatory due diligence of each other and the negotiation of the Quellis Acquisition Agreement, the term sheet included a binding exclusivity provision obligating each party to negotiate exclusively with the other until January 22, 2021. On January 21, 2021, the parties agreed to extend the term of the exclusivity provision until February 5, 2021 to facilitate continued discussions with investors in the February 2021 Financing.

On January 28, 2021, following the approval of our Board of Directors, we and Quellis entered into the Quellis Acquisition Agreement, pursuant to which our company had a deemed enterprise value of \$25 million and Quellis had a deemed enterprise value of \$185 million, which, based on actual closing net cash held by us of approximately \$37.1 million, resulted in our pre-closing stockholders retaining approximately 25.1% of the combined company on an as-converted-to-common-stock basis and before giving effect to the February 2021 Financing, with an implied equity value per share of approximately \$3.09. On January 28, 2021, the closing price of our common stock on the Nasdaq Stock Market was \$2.43.

Also on January 28, 2021, our Board of Directors approved the February 2021 Financing at the same implied equity value per share of approximately \$3.09, which resulted in our pre-closing stockholders retaining approximately 17.4% of the combined company, while Quellis equity holders received approximately 51.8% of the combined company and the investors in the February 2021 Financing received approximately 30.8% of the combined company, in each case on an as-converted-to-common-stock basis.

In approving the Transactions, our Board of Directors considered the advantages and disadvantages of the Transactions compared to other alternatives, including continuing to focus our resources on our legacy research and development pipeline, the other proposals received by us in connection with the process conducted by our Board of Directors, other potential business development opportunities reviewed by our Board of Directors, the potential liquidation of our company and the opportunities and risks associated with the Transactions. In particular, our Board of Directors took into account the following factors in approving the Transactions:

- Our Board of Directors' belief that, as a result of arm's length negotiations with Quellis, we, through our management team and financial advisor, negotiated the most favorable equity split for our pre-closing stockholders to which Quellis was willing to agree, and that the terms of the Quellis Acquisition Agreement include the most favorable terms to us in the aggregate to which Quellis was willing to agree.
- Our Board of Directors' belief, after a thorough review of strategic alternatives and discussions with our senior management, financial advisor and legal counsel, that the Quellis Acquisition was more favorable to our pre-closing stockholders than the potential value that might have resulted from other strategic options available to us, including a liquidation of our company and the distribution of any available cash. Based on an analysis of estimated cash balances and post-liquidation costs, the liquidation of our company would have resulted in a payment of approximately \$1.47 per share of common stock, representing approximately \$1.62 less than the \$3.09 equity value per share value implied by the equity split in the Quellis Acquisition as of January 28, 2021.
- Our Board of Directors' belief that, following the February 2021 Financing, we would have adequate cash resources to fund the near-term development of QLS-215, our lead product candidate.
- Our Board of Directors' belief, based in part on the scientific due diligence and analysis process conducted by our management and reviewed with our Board of Directors, that QLS-215 represents a promising treatment option for patients living with HAE, a rare, debilitating and potentially life-threatening disease.
- Our Board of Directors' belief that the structure of the Quellis Acquisition (*i.e.*, the issuance of common stock and Series X Preferred Stock at a simultaneous sign and close of the Quellis Acquisition (the "Acquisition Structure")), instead of a structure in which the closing of the Quellis Acquisition would be conditioned on receipt of approval of the issuance of common stock in the Quellis Acquisition by our pre-closing stockholders (the "Traditional Structure"), was beneficial to our pre-closing stockholders because the Acquisition Structure allowed us to maximize the amount of closing net cash held by us, which resulted in an equity split that was more favorable to our pre-closing stockholders than if we had pursued a transaction with the Traditional Structure.

After giving consideration to these and other factors, our Board of Directors approved the Transactions, which our Board of Directors believes best position us for long-term success.

## **Overview of Proposal No. 2**

As described above, we issued 50,504 shares of Series X Preferred Stock in the Quellis Acquisition and 35,573 shares of Series X Preferred Stock in the February 2021 Financing. Additionally, we reserved 2,805

shares of Series X Preferred Stock for issuance upon the exercise of a warrant assumed in the Quellis Acquisition. The Series X Preferred Stock is intended to have rights that are generally equivalent to common stock, provided that the Series X Preferred Stock does not have the right to vote on most matters (including the election of directors). 88,882,000 shares of common stock are issuable upon conversion of the above-described Series X Preferred Stock, assuming the approval of the Proposal No. 2 and subject to certain beneficial ownership limitations.

Subject to stockholder approval, each share of Series X Preferred Stock is convertible into 1,000 shares of common stock. This Proposal No. 2 would provide the necessary approval to permit such conversion. If our stockholders have not approved the conversion of the Series X Preferred Stock into common stock by July 28, 2021 (six months after the closing of the Quellis Acquisition), then a holder of Series X Preferred Stock may require us to settle any conversion demand made thereafter in cash by delivering to the holder an amount of cash equal to the number of shares of our common stock underlying the holder's Series X Preferred Stock multiplied by the last reported closing sale price of our common stock on the Nasdaq Capital Market (or other applicable stock exchange) on the trading day on which the applicable notice of conversion is delivered to us. See "—Risks Associated with the Series X Preferred Stock" below.

### Shares Issuable Upon Conversion

Set forth below is a table summarizing the issued and outstanding Series X Preferred Stock, as well as the number of shares of common stock that are potentially issuable upon conversion of the Series X Preferred Stock. The sale into the public market of the underlying common stock could materially and adversely affect the market price of our common stock. See "—Risks Associated with the Series X Preferred Stock" below.

	Series X Preferred Stock Issued and Outstanding	Series X Preferred Stock Issuable Upon Exercise of Warrant	Common Stock (as converted)
Shares issued in Quellis Acquisition	50,504	—	50,504,000
Warrant assumed in Quellis Acquisition	—	2,805	2,805,000
February 2021 Financing	35,573	—	35,573,000
Total	<u>86,077</u>	<u>2,805</u>	<u>88,882,000</u>

### Description of Series X Preferred Stock

**Conversion.** Subject to stockholder approval of this Proposal No. 2, the Series X Preferred Stock is, except as set forth below, automatically convertible into common stock at a rate of 1,000 shares of common stock for every one share of Series X Preferred Stock that is converted. Following stockholder approval of this Proposal No. 2, at any time after 5:00 p.m. (Eastern time) on the fourth business day after the date on which such stockholder approval is received at the option of the holder thereof, each share of Series X Preferred Stock will be converted into 1,000 shares of common stock, subject to certain beneficial ownership limitations, including that a holder of Series X Preferred Stock is prohibited from converting shares of Series X Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than a specified percentage (to be initially set by the holder to a number between 4.9% and 19.9% and thereafter adjusted) of the total number of shares of common stock issued and outstanding immediately after giving effect to such conversion.

**Voting Rights.** Except as otherwise required by law, the Series X Preferred Stock does not have voting rights. However, as long as any shares of Series X Preferred Stock are outstanding, we will not, without the affirmative vote of the holders of a majority of the then outstanding shares of the Series X Preferred Stock, (i) alter or change adversely the powers, preferences or rights given to the Series X Preferred Stock or alter or amend the Certificate of Designation, amend or repeal any provision of, or add any provision to, our Certificate of Incorporation or bylaws of, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the

Series X Preferred Stock, (ii) issue further shares of Series X Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series X Preferred Stock, or (iii) enter into any agreement with respect to any of the foregoing. Additionally, the approval of the holders of a majority of the Series X Preferred Stock is required for certain change of control transactions, provided that this approval right will terminate upon stockholder approval of the Series X Preferred Stock Conversion Proposal.

**Dividends.** Holders of Preferred Stock are entitled to receive dividends on shares of Series X Preferred Stock equal, on an as-converted-to-common-stock basis, and in the same form as dividends actually paid on shares of the common stock.

**Liquidation and Dissolution.** The Series X Preferred Stock ranks on parity with common stock upon any liquidation, dissolution or winding-up.

#### **Reasons for Stockholder Approval**

Our common stock is listed on the Nasdaq Capital Market, and, as such, we are subject to the applicable rules of the Nasdaq Stock Market LLC, including Nasdaq Listing Rule 5635(a), which requires stockholder approval in connection with the acquisition of another company if the Nasdaq-listed company will issue 20% or more of its common stock. For purposes of Nasdaq Listing Rule 5635(a), the issuance of any common stock in the Quellis Acquisition and the February 2021 Financing would be aggregated together. Thus, in order to permit the issuance of common stock upon conversion of the Series X Preferred Stock, we must first obtain stockholder approval of this issuance.

#### **Beneficial Ownership Limitations.**

We are not seeking stockholder approval of a potential “change in control” under Nasdaq Listing Rule 5635(b), which generally prohibits Nasdaq-listed companies from issuing common stock to a stockholder in a transaction that would cause the holder to beneficially own 20% or more of the then-outstanding common stock (subject to certain exceptions). Assuming that Proposal No. 2 is approved, the Series X Preferred Stock will continue to have a beneficial ownership conversion limit that would prevent a stockholder from converting their shares if, as a result of such conversion, they would beneficially own a number of shares above their applicable conversion blocker (which cannot exceed 19.9% of our outstanding common stock).

#### **Interests of Certain Parties**

As described in our Current Report on Form 8-K filed with the SEC on January 29, 2021, in connection with the Transactions, our Board of Directors appointed Jonathan Violin and Fred Callori to our Board of Directors.

Dr. Violin, age 45, is a co-founder of Quellis, and served as its Treasurer and Secretary from December 2018 until the Quellis Acquisition in January 2021, and served as President of Quellis from December 2018 to December 2020. In connection with the Quellis Acquisition, (i) a limited liability company in which Dr. Violin has an indirect interest received 543,373 shares of our common stock and 8,234 shares of Series X Preferred Stock in exchange for 350,000 shares of Quellis common stock, and (ii) a limited liability company in which Dr. Violin holds a profits interest received warrants to purchase 185,136 shares of our common stock and 2,805 shares of Series X Preferred Stock in exchange for a warrant to purchase 119,251 shares of Quellis common stock. In connection with the Transactions, these entities received the same consideration, as described above, received by other holders of other Quellis securities. In connection with Dr. Violin’s appointment to our Board of Directors, Dr. Violin entered into our standard form of indemnification agreement.

Certain funds managed by Perceptive Advisors LLC (“Perceptive”) are our stockholders and were stockholders of Quellis. Mr. Callori has an indirect pecuniary interest in two of the Perceptive entities that were stockholders in Quellis, which Perceptive funds received 2,476,924 shares of our common stock and 37,537 shares of Series X Preferred Stock in exchange for an aggregate of 350,000 shares of Quellis common stock and 1,245,447 shares of Quellis preferred stock. In connection with the Transactions, these Perceptive entities received the same consideration, as described above, received by other holders of other

Quellis securities. In connection with Mr. Callori's appointment to our Board of Directors, he entered into our standard form of indemnification agreement.

#### **Certain Risks Associated with the Series X Preferred Stock**

In connection with the Quellis Acquisition, we issued Series X Preferred Stock to Quellis stockholders and to the purchasers in the February 2021 Financing. We are obligated under the Quellis Acquisition Agreement to seek shareholder approval for the conversion of the Series X Preferred Stock into common stock. In the event that we fail to obtain stockholder approval, we may face certain penalties that may harm our business and impact our ability to raise additional funds in the future. If our stockholders have not approved the conversion of the Series X Preferred Stock into common stock by July 28, 2021 (six months after the closing of the Quellis Acquisition), then a holder of Series X Preferred Stock may require us to settle any conversion demand made thereafter in cash by delivering to the holder an amount of cash equal to the number of shares of our common stock underlying the holder's Series X Preferred Stock multiplied by the last reported closing sale price of our common stock on the Nasdaq Capital Market (or other applicable stock exchange) on the trading day on which the applicable notice of conversion is delivered to us. If we are forced to redeem a significant amount of shares underlying the Series X Preferred Stock, it could, among other things, materially affect our results of operations and cash usage forecasts, require us to slow down or stop the development of QLS-215 and any other future product candidates, require us to raise additional capital and impact our ability to raise additional capital. Also, while we cannot predict the amount with any level of certainty, there is a level of cash settlement at which, if it is exceeded, could require us to make redemption payments in excess of our current liquidity.

As of February 28, 2021, the holders of 86,077 shares of our Series X Preferred Stock, which are convertible into 86,077,000 shares of our common stock, are entitled to rights, under the Registration Rights Agreement, with respect to the registration of their shares under the Securities Act. Additionally, we have agreed to register, under the Registration Rights Agreement, 3,332,669 shares of our common stock under the Securities Act. Registration of these shares under the Securities Act will result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

#### **Vote Required and Board of Directors Recommendation**

Stockholder approval of this Proposal No. 2 requires a "FOR" vote from the holders of a majority of votes properly cast at the Annual Meeting (subject to the separate tabulation of votes described in "Important Information About the Annual Meeting and Voting—Who Can Vote at the Annual Meeting" set forth above).

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR"  
PROPOSAL NO 2.**

## PROPOSAL NO. 3—APPROVAL OF REVERSE STOCK SPLIT PROPOSAL

### General

On March 15, 2021, our Board of Directors unanimously approved, subject to stockholder approval, amendments to our certificate of incorporation to effect a reverse stock split of our outstanding common stock by combining outstanding shares of common stock into a lesser number of outstanding shares of common stock by a ratio in the range of 1-for-3 to 1-for-6 at any time prior to December 2, 2021, with the exact ratio to be set within this range by our Board of Directors at its sole discretion and with all amendments reflecting ratios other than the ratio selected by our Board of Directors to be abandoned (the “Reverse Stock Split”). Our Board of Directors may alternatively elect to abandon all such proposed amendments and not effect the Reverse Stock Split authorized by stockholders, in its sole discretion. Upon the effectiveness of the amendment to our certificate of incorporation effecting the Reverse Stock Split, the outstanding shares of our common stock will be reclassified and combined into a lesser number of shares such that one share of our common stock will be issued for a specified number of shares in accordance with the ratio for the Reverse Stock Split selected by our Board of Directors.

If this Proposal No. 3 is approved by our stockholders as proposed, our Board of Directors would have the sole discretion to effect the amendment and Reverse Stock Split at any time prior to December 2, 2021, and to fix the specific ratio for the Reverse Stock Split, provided that the ratio would be in the range of 1-for-3 to 1-for-6. We believe that enabling our Board of Directors to fix the specific ratio of the Reverse Stock Split within the stated range will provide us with the flexibility to implement the split in a manner designed to maximize the anticipated benefits for our stockholders. The determination of the ratio of the Reverse Stock Split will be based on a number of factors, described further below under the heading “—Criteria to be Used for Decision to Apply the Reverse Stock Split.”

The Reverse Stock Split, if approved by our stockholders, would become effective upon the filing of an amendment to our certificate of incorporation with the Secretary of State of the State of Delaware. The exact timing of the amendment will be determined by our Board of Directors based on its evaluation as to when such action will be the most advantageous to us and our stockholders, but the amendment will not occur after December 2, 2021. In addition, our Board of Directors reserves the right, notwithstanding stockholder approval and without further action by our stockholders, to abandon all of the proposed amendments and the Reverse Stock Split if, at any time prior to the effectiveness of the filing of a certificate of amendment with the Secretary of State, our Board of Directors, in its sole discretion, determines that it is no longer in our best interest and the best interests of our stockholders to proceed.

The primary purpose for effecting the Reverse Stock Split is to increase the per share trading price of our common stock so as to:

- increase the acceptability of our common stock to long-term investors who may not find our shares attractive at their current prices due to the trading volatility often associated with stocks below certain prices;
- make our common stock eligible for investment by brokerage houses and institutional investors that have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers or by restricting or limiting the ability to purchase such stocks on margin; and
- make our common stock more attractive for investors who may be dissuaded from purchasing stocks below certain prices because the brokerage commissions, as a percentage of the total transaction value, tend to be higher for such low-priced stocks.

In evaluating the Reverse Stock Split, our Board of Directors has taken, and will take, into consideration negative factors associated with reverse stock splits. These factors include the negative perception of reverse stock splits held by many investors, analysts and other stock market participants, as well as the fact that the stock price of some companies that have effected reverse stock splits has subsequently declined back to pre-reverse stock split levels. In approving the amendments to our certificate of incorporation for the Reverse Stock Split, our Board of Directors determined that these potential negative factors were significantly outweighed by the potential benefits.

The form of the proposed amendments to our certificate of incorporation to effect the Reverse Stock Split is attached as Appendix A to this proxy statement. Any amendment to our certificate of incorporation to effect the Reverse Stock Split will include the Reverse Stock Split ratio fixed by our Board of Directors, within the range contained in the amendments approved by our stockholders.

#### **Criteria to be Used for Decision to Apply the Reverse Stock Split**

If our stockholders approve the Reverse Stock Split, our Board of Directors will be authorized to proceed with the Reverse Stock Split. The exact ratio of the Reverse Stock Split, within the 1-for-3 to 1-for-6 range, would be determined by our Board of Directors and publicly announced by us prior to the effective time of the Reverse Stock Split. In determining whether to proceed with the Reverse Stock Split and setting the appropriate ratio for the Reverse Stock Split, our Board of Directors will consider, among other things, factors such as:

- the historical trading prices and trading volume of our common stock;
- the number of shares of our common stock outstanding;
- the then-prevailing and expected trading prices and trading volume of our common stock and the anticipated impact of the Reverse Stock Split on the trading market for our common stock;
- the anticipated impact of a particular ratio on our ability to reduce administrative and transactional costs;
- business developments affecting us; and
- prevailing general market and economic conditions.

#### **Reasons for the Reverse Stock Split**

##### *Stock Price Volatility.*

We have been advised that a higher stock price may increase the acceptability of our common stock to a number of long-term investors who may not find our shares attractive at their current prices due to the trading volatility often associated with stocks below certain prices.

##### *Stock Price Requirements.*

We understand that many brokerage houses and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers or by restricting or limiting the ability to purchase such stocks on margin.

##### *Transaction Costs.*

Investors also may be dissuaded from purchasing stocks below certain prices because the brokerage commissions, as a percentage of the total transaction value, tend to be higher for such low-priced stocks.

#### **Certain Risks Associated with the Reverse Stock Split**

There can be no assurance that the total market capitalization of our common stock after the implementation of the Reverse Stock Split will be equal to or greater than the total market capitalization before the Reverse Stock Split or that the per share market price of our common stock following the Reverse Stock Split will increase in proportion to the reduction in the number of shares of our common stock outstanding in connection with the Reverse Stock Split. Also, we cannot assure you that the Reverse Stock Split would lead to a sustained increase in the trading price of our common stock. The trading price of our common stock may change due to a variety of other factors, including our ability to successfully accomplish our business goals, market conditions and the market perception of our business. You should also keep in mind that the implementation of a reverse stock split does not have an effect on the actual or intrinsic value of our business or a stockholder's proportional ownership in our company. However, should the overall



value of our common stock decline after the proposed Reverse Stock Split, then the actual or intrinsic value of the shares of our common stock held by you will also proportionately decrease as a result of the overall decline in value.

Further, the liquidity of our common stock may be harmed by the proposed Reverse Stock Split given the reduced number of shares that would be outstanding after the Reverse Stock Split, particularly if the expected increase in stock price as a result of the Reverse Stock Split is not sustained. In addition, the proposed Reverse Stock Split may increase the number of stockholders who own odd lots (less than 100 shares) of our common stock, creating the potential for such stockholders to experience an increase in the cost of selling their shares and greater difficulty effecting sales. If we effect the Reverse Stock Split, the resulting per-share stock price may nevertheless fail to attract institutional investors and may not satisfy the investing guidelines of such investors and, consequently, the trading liquidity of our common stock may not improve.

#### **Effect of the Reverse Stock Split**

If the Reverse Stock Split Proposal is approved and our Board of Directors elects to effect the Reverse Stock Split, the number of outstanding shares of common stock will be reduced in proportion to the ratio of the split chosen by our Board of Directors. As of the effective time of the Reverse Stock Split, we would also adjust and proportionately decrease the number of shares of our common stock reserved for issuance upon exercise of, and adjust and proportionately increase the exercise price of, all options and warrants, the number of shares of our common stock reserved for issuance upon conversion of our Series X Preferred Stock and the number of shares of our common stock reserved for issuance upon exercise of other rights to acquire our common stock. In addition, as of the effective time of the Reverse Stock Split, we would adjust and proportionately decrease the total number of shares of our common stock that may be the subject of the future grants under our stock plans.

The Reverse Stock Split would be effected simultaneously for all outstanding shares of our common stock. The Reverse Stock Split would affect all of our stockholders uniformly and would not change any stockholder's percentage ownership interest in our company, except to the extent that the Reverse Stock Split results in any of our stockholders owning fractional shares. We will not issue any fractional shares as a result of the Reverse Stock Split and in lieu thereof any stockholders that would otherwise be entitled to receive a fractional share will be entitled to a cash payment. The Reverse Stock Split would not change the terms of our common stock. The Reverse Stock Split is not intended as, and would not have the effect of, a "going private transaction" covered by Rule 13e-3 under the Exchange Act. Following the Reverse Stock Split, we would continue to be subject to the periodic reporting requirements of the Exchange Act.

Assuming Reverse Stock Split ratios of 1-for-3, 1-for-4.5 and 1-for-6, which reflect the low end, middle and high end of the range that our stockholders are being asked to approve, the following table sets forth (i) the number of shares of our common stock that would be issued and outstanding, (ii) the number of shares of our common stock that would be reserved for issuance pursuant to outstanding warrants and options, and (iii) the weighted-average exercise price of outstanding options and warrants, each giving effect to the Reverse Stock Split and based on securities outstanding as of March 31, 2021 and assuming stockholder approval of the Series X Preferred Stock Conversion Proposal. If our Board of Directors does not implement the Reverse Stock Split by December 2, 2021, the authority granted in this proposal to implement the Reverse Stock Split would terminate.

	Before Reverse Stock Split	Reverse Stock Split Ratio of 1-for-3	Reverse Stock Split Ratio of 1-for-4.5	Reverse Stock Split Ratio of 1-for-6
Number of Shares of Common Stock Issued and Outstanding	23,417,006	7,805,669	5,203,779	3,902,834
Number of Shares of Common Stock Reserved for Issuance Pursuant to Outstanding Options and Warrants(1)	10,815,207	3,605,069	2,403,379	1,802,535
Weighted-Average Exercise Price of Outstanding Options and Warrants	\$ 7.31	\$ 21.94	\$ 32.91	\$ 43.89
Number of Shares of Common Stock Reserved for Issuance upon Conversion of Series X Preferred Stock	86,077,000	28,692,333	19,128,222	14,346,167

(1) Includes 2,805,000 shares of common stock reserved for issuance upon conversion of shares of Series X Preferred Stock issuable upon exercise of a warrant.

Our directors and executive officers have no substantial interests, directly or indirectly, in the matters set forth in the Reverse Stock Split Proposal, except to the extent of their ownership of shares of our common stock and securities convertible or exercisable for our common stock, which shares and securities would be subject to the same proportionate adjustment in accordance with the terms of the Reverse Stock Split as all other outstanding shares of our common stock and securities convertible into or exercisable for our common stock.

#### Authorized Shares of Common Stock

We are currently authorized under our certificate of incorporation to issue up to a total of 155,000,000 shares of capital stock, comprised of 150,000,000 shares of common stock and 5,000,000 shares of preferred stock, including 91,380 shares of Series X Convertible Preferred Stock. While the Reverse Stock Split would decrease the number of outstanding shares of our common stock, it would not change the number of authorized shares under our certificate of incorporation. Consequently, the Reverse Stock Split would have the effect of increasing the number of shares of common stock available for issuance under our certificate of incorporation. Our Board of Directors believes that such an increase is in our and our stockholders' best interests as it would provide us with greater flexibility to issue shares of common stock in connection with possible future financings, joint ventures and acquisitions as well as under our equity incentive plans and for other general corporate purposes. We do not currently have any plans, understandings, arrangements, commitments or agreements, written or oral, for the issuance of the additional shares of common stock that would become available for issuance if the Reverse Stock Split is effected, however we desire to have the shares available to provide us with additional flexibility to use our common stock for these business and financial purposes in the future.

By increasing the number of authorized but unissued shares of common stock, the Reverse Stock Split could, under certain circumstances, have an anti-takeover effect, although this is not the intent of our Board of Directors. For example, our Board of Directors might be able to delay or impede a takeover or transfer of control of our company by causing such additional authorized but unissued shares to be issued to holders who might side with our Board of Directors in opposing a takeover bid that the Board of Directors

determines is not in the best interests of our company or our stockholders. The Reverse Stock Split could therefore have the effect of discouraging unsolicited takeover attempts. By potentially discouraging initiation of any such unsolicited takeover attempts the Reverse Stock Split could limit the opportunity for our stockholders to dispose of their shares at the higher price generally available in takeover attempts or that may be available under a merger proposal. The Reverse Stock Split could have the effect of permitting our current management, including our current Board of Directors, to retain its position, and place it in a better position to resist changes that stockholders may wish to make if they are dissatisfied with the conduct of our business. However, our Board of Directors is not aware of any attempt to take control of our company and the Board of Directors did not authorize the Reverse Stock Split with the intent that it be utilized as a type of anti-takeover device.

#### **Procedure for Effecting the Reverse Stock Split**

If our stockholders approve the Reverse Stock Split Proposal, and if our Board of Directors still believes that a Reverse Stock Split is in the best interests of us and our stockholders, our Board of Directors will determine the ratio of the Reverse Stock Split to be implemented and we will publicly announce the ratio selected by our Board of Directors and file with the Secretary of State of the State of Delaware the certificate of amendment reflecting such ratio to effect the Reverse Stock Split.

**Beneficial Owners of Common Stock.** Upon the implementation of the Reverse Stock Split, we would treat shares held by stockholders in street name in the same manner as shares held directly by stockholders of record. Banks, brokers, custodians or other nominees would be instructed to effect the Reverse Stock Split for their beneficial holders holding our common stock in street name. However, these banks, brokers, custodians or other nominees may have different procedures than our procedures for stockholders of record for processing the Reverse Stock Split and making payment for fractional shares. If a stockholder holds shares of our common stock with a bank, broker, custodian or other nominee and has any questions in this regard, stockholders are encouraged to contact their bank, broker, custodian or other nominee.

**Registered Holders of Common Stock.** All of our registered holders of common stock hold their shares electronically in book-entry form with our transfer agent, American Stock Transfer & Trust Company, LLC. These stockholders do not hold physical stock certificates evidencing their ownership of our common stock. However, they are provided with a statement reflecting the number of shares of our common stock registered in their accounts. If a stockholder holds registered shares in book-entry form with our transfer agent, no action needs to be taken to receive post-Reverse Stock Split shares and any payment in lieu of fractional shares, if applicable, because the exchange and payment will be automatic.

#### **Fractional Shares**

We would not issue fractional shares in connection with the Reverse Stock Split. Instead, stockholders who otherwise would be entitled to receive fractional shares because they hold a number of shares not evenly divisible by the Reverse Stock Split ratio would be entitled to receive a cash payment in lieu thereof at a price equal to the fraction of a share to which the stockholder would otherwise be entitled multiplied by the closing price of our common stock as reported on the Nasdaq on the effective date of the Reverse Stock Split.

#### **No Appraisal Rights**

No action is proposed herein for which the laws of the State of Delaware, or our certificate of incorporation or bylaws, provide a right to our stockholders to dissent and obtain appraisal of, or payment for, such stockholders' capital stock.

#### **Accounting Matters**

The Reverse Stock Split would not affect the par value of our common stock per share, which would remain \$0.001 par value per share, while the number of outstanding shares of common stock would decrease in accordance with the Reverse Stock Split ratio. As a result, as of the effective time of the Reverse Stock Split, the stated capital attributable to common stock on our balance sheet would decrease and the additional paid-in capital account on our balance sheet would increase by an offsetting amount. Following the

Reverse Stock Split, reported per share net income or loss would be higher because there would be fewer shares of common stock outstanding and we would adjust historical per share amounts set forth in our future financial statements.

### **Federal Income Tax Consequences**

The following discussion is a summary of the material U.S. federal income tax consequences of a reverse stock split to us and to U.S. Holders (as defined below) that hold shares of our common stock as capital assets for U.S. federal income tax purposes. This discussion is based upon current U.S. tax law, which is subject to change, possibly with retroactive effect, and differing interpretations. Any such change may cause the U.S. federal income tax consequences of a reverse stock split to vary substantially from the consequences summarized below. We have not sought and will not seek any rulings from the Internal Revenue Service (the "IRS") regarding the matters discussed below and there can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed Reverse Stock Split.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of our common stock that, for U.S. federal income tax purposes, is or is treated as (i) an individual who is a citizen or resident of the United States; (ii) a corporation (or any other entity or arrangement treated as a corporation) created or organized under the laws of the United States, any state thereof, or the District of Columbia; (iii) an estate, the income of which is subject to U.S. federal income tax regardless of its source; or (iv) a trust if (1) its administration is subject to the primary supervision of a court within the United States and all of its substantial decisions are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code or (2) it has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

This summary does not address all aspects of U.S. federal income taxation that may be relevant to U.S. Holders in light of their particular circumstances or to stockholders who may be subject to special tax treatment under the Code, including, without limitation, dealers in securities, commodities or foreign currency, persons who are treated as non-U.S. persons for U.S. federal income tax purposes, certain former citizens or long-term residents of the United States, insurance companies, tax-exempt organizations, banks, financial institutions, small business investment companies, regulated investment companies, real estate investment trusts, retirement plans, persons whose functional currency is not the U.S. dollar, traders that mark-to-market their securities or persons who hold their shares of our common stock as part of a hedge, straddle, conversion or other risk reduction transaction. If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes is the beneficial owner of our common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Accordingly, partnerships (and other entities treated as partnerships for U.S. federal income tax purposes) holding our common stock and the partners in such entities should consult their own tax advisors regarding the U.S. federal income tax consequences of the proposed Reverse Stock Split to them.

The state and local tax consequences, alternative minimum tax consequences, non-U.S. tax consequences and U.S. estate and gift tax consequences of a reverse stock split are not discussed herein and may vary as to each U.S. Holder. Furthermore, the following discussion does not address any tax consequences of transactions effectuated before, after or at the same time as the proposed Reverse Stock Split, whether or not they are in connection with the proposed Reverse Stock Split. This discussion should not be considered as tax or investment advice, and the tax consequences of a reverse stock split may not be the same for all stockholders. U.S. Holders should consult their own tax advisors to understand their individual federal, state, local and foreign tax consequences.

***Tax Consequences to the Company.*** We believe that a reverse stock split will constitute a reorganization under Section 368(a)(1)(E) of the Code. Accordingly, we should not recognize taxable income, gain or loss in connection with a reverse stock split.

***Tax Consequences to U.S. Holders.*** A U.S. Holder generally should not recognize gain or loss upon the proposed Reverse Stock Split for U.S. federal income tax purposes, except with respect to cash received in lieu of a fractional share of our common stock, as discussed below. A U.S. Holder's aggregate adjusted tax

basis in the shares of our common stock received pursuant to the proposed Reverse Stock Split should equal the aggregate adjusted tax basis of the shares of our common stock exchanged therefor (reduced by the amount of such basis that is allocated to any fractional share of our common stock). The U.S. Holder's holding period in the shares of our common stock received pursuant to the proposed Reverse Stock Split should include the holding period in the shares of our common stock exchanged therefor. U.S. Treasury Regulations provide detailed rules for allocating the tax basis and holding period of shares of common stock surrendered in a recapitalization to shares received in the recapitalization. U.S. Holders of shares of our common stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

A U.S. Holder that, pursuant to the proposed Reverse Stock Split, receives cash in lieu of a fractional share of our common stock should recognize capital gain or loss in an amount equal to the difference, if any, between the amount of cash received and the portion of the U.S. Holder's aggregate adjusted tax basis in the shares of our common stock surrendered that is allocated to such fractional share. Such capital gain or loss will be short term if the pre-Reverse Stock Split shares were held for one year or less at the effective time of the Reverse Stock Split and long term if held for more than one year. No gain or loss will be recognized by us as a result of the proposed Reverse Stock Split.

A U.S. Holder of our common stock may be subject to information reporting and backup withholding on cash paid in lieu of a fractional share in connection with the proposed Reverse Stock Split. A U.S. Holder of our common stock will be subject to backup withholding if such U.S. Holder is not otherwise exempt and such U.S. Holder does not provide its taxpayer identification number in the manner required or otherwise fails to comply with applicable backup withholding tax rules. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be refunded or allowed as a credit against a U.S. Holder's federal income tax liability, if any, provided the required information is timely furnished to the IRS. U.S. Holders of our common stock should consult their own tax advisors regarding their qualification for an exemption from backup withholding and the procedures for obtaining such an exemption.

The U.S. federal income tax discussion set forth above does not discuss all aspects of U.S. federal income taxation that may be relevant to a particular stockholder in light of such stockholder's circumstances and income tax situation. Accordingly, we urge you to consult with your own tax advisor with respect to all of the potential U.S. federal, state, local and foreign tax consequences to you of the Reverse Stock Split.

#### **Vote Required and Board of Directors Recommendation**

Pursuant to the Delaware General Corporation Law, this proposal must be approved by the affirmative vote of a majority of the outstanding shares of our common stock. Abstentions and broker non-votes with respect to this proposal will be counted for purposes of establishing a quorum and, if a quorum is present, will have the same practical effect as a vote against this proposal.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THE AMENDMENTS TO OUR CERTIFICATE OF INCORPORATION TO APPROVE THE REVERSE STOCK SPLIT.**

#### PROPOSAL NO. 4—APPROVAL OF PLAN INCREASE PROPOSAL

On March 15, 2021, our Board of Directors unanimously approved, subject to stockholder approval, an amendment of our Amended and Restated 2015 Stock Incentive Plan (the “2015 Plan”) to increase the number of shares issuable thereunder by 6,000,000 (the “Plan Increase”). We are asking our stockholders to approve this amendment.

#### Why We Are Requesting Stockholder Approval of the Amendment to our Amended and Restated 2015 Plan

We believe that our future success depends, in large part, upon our ability to maintain a competitive position in attracting, retaining and motivating persons who are expected to make important contributions to our company by providing such persons with equity ownership opportunities and performance-based incentives. The life sciences industry in the Cambridge and Boston, Massachusetts market is highly competitive, and our results are largely attributable to the talents, expertise, efforts and dedication of our employees. Our compensation program, including the granting of equity compensation, is the primary means by which we attract and recruit new employees, as well as retain our most experienced and skilled employees.

Equity compensation is also fundamental to our compensation philosophy and core objectives of paying for performance and aligning the interests of employees with those of stockholders. A significant portion of our employees’ compensation is provided in the form of equity. We believe that equity awards, and the potential they hold for appreciation through an increase in our stock price, support our pay-for-performance philosophy, provide further incentive to our employees to focus on creating long-term stockholder value and create an ownership culture that links employees’ interests with those of our stockholders and our long-term results, performance, and financial condition.

As detailed in the table below, as a result of our issuance of shares of common stock and Series X Preferred Stock in the Quellis Acquisition and the February 2021 Financing, the percentage of our fully diluted capitalization that was represented by outstanding stock options, the only type of equity incentive award that we have used to date, under our 2015 Plan and our 2008 Equity Incentive Plan (the “2008 Plan”) was reduced from 4.5% to 1.4%.

	Outstanding Stock Options	Fully Diluted Outstanding Shares	Outstanding Options as a Percentage of Fully Diluted Outstanding Shares
Immediately prior to Quellis Acquisition and February 2021 Financing	1,332,726	29,581,911(1)	4.5%
Immediately after Quellis Acquisition and February 2021 Financing	1,687,720	122,314,210(2)	1.4%

- (1) Consists of outstanding shares of common stock, shares of common stock underlying vested and unvested equity awards outstanding, shares of common stock underlying outstanding warrants and shares of common stock underlying equity awards available for issuance pursuant to our 2015 Plan on January 27, 2021.
- (2) Consists of outstanding shares of common stock, shares of common stock underlying vested and unvested equity awards outstanding, shares of common stock underlying outstanding warrants and shares of common stock underlying equity awards available for issuance pursuant to our 2015 Plan on February 2, 2021, shares of common stock underlying outstanding shares of Series X Preferred Stock issued in the Quellis Acquisition and February 2021 Financing, shares of common stock underlying the common and preferred stock warrants issued in the Quellis Acquisition and the shares of common stock underlying stock options assumed in the Quellis Acquisition.

Similarly, the shares of common stock available for issuance under the 2015 Plan based on our fully diluted shares of common stock immediately prior to the closing of the Quellis Acquisition represented approximately 6.2% of our fully diluted capitalization immediately prior to the Quellis Acquisition and February 2021 Financing, and approximately 1.6% of fully diluted capitalization immediately after the Quellis Acquisition and February 2021 Financing. The outstanding stock options under the 2015 Plan have

since been further diluted by 0.1% and, as of March 31, 2021, on a fully-diluted basis, we had 122,305,535 shares of common stock outstanding.

In addition, as of March 31, 2021, approximately 78% of our outstanding stock options, exclusive of the options that we assumed in the Quellis Acquisition, as described below, had exercise prices well above our stock price as of March 31, 2021. These stock options had a weighted-average exercise price of \$9.16 per share and individual option exercise prices ranging up to \$140.50 per share as compared to the \$2.89 per share closing price of our common stock on the Nasdaq Global Market on March 31, 2021. In connection with the Quellis Acquisition, we assumed outstanding Quellis options, all of which were granted to Quellis consultants, that converted into options to purchase 332,494 shares of our common stock; these options have a weighted average exercise price of \$0.29.

Accordingly, due to the Quellis Acquisition and the February 2021 Financing, our 2015 Plan participants had a very limited opportunity to participate in any future appreciation in the value of our common stock. For example, excluding the grant of stock options in April 2021 described below, if the value of our common stock tripled from its closing price on the Nasdaq Global Market of \$2.89 on March 31, 2021 to \$8.67 per share, plan participants would be entitled to realize less than 0.8% of the increased equity value of our company on a fully diluted basis assuming full acceleration of all vesting provisions. Our compensation committee and our Board of Directors believe that such a limited opportunity to participate in appreciation in the value of our common stock resulted in such outstanding options having insufficient retention value for our plan participants, put us at risk of not being able to retain our most experienced and skilled individuals and provided for insufficient alignment of our plan participants' interests with those of our stockholders.

As a result, our compensation committee, upon the recommendation of Aon and our senior management, approved an annual stock option award program for 2021 that reflected:

- our fully-diluted capitalization structure and the need to refresh the stock option positions of our employees due to the substantial dilution to their historical stock options;
- the limited opportunity our employees have to participate in the appreciation in the value of our common stock based on stock options granted to them prior to 2021;
- that, as a result of our new profile after the Quellis Acquisition and February 2021 Financing, including our larger market capitalization and changes in our executive compensation levels as approved by our compensation committee in February 2021 attributable to evaluating our executive compensation against a new peer group of companies, our existing equity guidelines were below market in comparison to our new peer group and therefore needed to be adjusted upwards starting with the 2021 annual option awards;
- our goal of maintaining our compensation philosophy and objective for equity incentive compensation of providing equity incentive compensation at the 60<sup>th</sup> percentile of our peer group companies; and
- the new focus of our company following the Quellis Acquisition, which amounted to essentially a new start to our company and, as a result, in the opinion of our compensation committee warranted new hire level option awards for the 2021 annual compensation and performance cycle.

Pursuant to this 2021 annual stock option award program, on April 1, 2021, we granted stock options for 4,989,000 shares of our common stock to our employees, with options to purchase 1,389,000 of such shares being granted to non-officer employees and officers who were not executive officers, and options to purchase 3,600,000 of such shares being granted to our executive officers, excluding Dr. Donovan. Dr. Donovan was granted an option to purchase 600,000 shares of common stock, which option will be forfeited upon her resignation as our Chief Medical Officer on April 23, 2021; this option is excluded from the foregoing figures. On April 1, 2021, we also granted an option to purchase 400,000 shares of our common stock to a newly hired officer who is not an executive officer (collectively, with the April 2021 annual stock option awards but excluding the grant to Dr. Donovan, the "April 2021 Grants"). The grants to our executive officers and our other officers were approved by our Board of Directors and made subject to the approval by our stockholders of this Proposal No. 4 or the approval of a comparable increase in shares of common stock available under the 2015 Plan at a subsequent stockholders meeting within twelve months of the grant date ("Required Stockholder Approval") due to the fact that the shares reserved under the 2015 Plan as of March 31, 2021 were not sufficient to cover all of such option grants. In the event that we do

not receive the Required Stockholder Approval, the April 2021 Grants made to our executive officers and our other officers will be forfeited. See the section entitled “Plan Benefits” below for information on the 2021 option grants made to our NEOs, other executive officers and officers who are not executive officers, all of which are subject to Required Stockholder Approval.

Based on the shares available for grant under the 2015 Plan as of March 31, 2021, we needed 3,392,678 shares of common stock to be added to the 2015 Plan to cover the April 2021 Grants. Along with the shares that we need to cover the April 2021 Grants, we are asking for an additional 2,607,322 shares of common stock to be added to the 2015 Plan in this Proposal No. 4 to cover planned grants to our non-employee directors and our estimated needs for grants to newly hired and promoted employees through the end of 2021.

During the years ended December 31, 2019 and 2020 we granted equity awards with respect to 454,420 and 666,200 shares, respectively, to employees, non-employee directors and consultants under our 2015 Plan. There were no new options granted during the three months ended March 31, 2021, other than the options assumed in the Quellis acquisition, as described above. A summary of outstanding stock options granted under our 2008 Plan and 2015 Plan, our shares available for grant under our 2015 Plan, and related information for employees and nonemployees as of March 31, 2021 follows:

<u>Options Outstanding</u>	<u>Shares Available for Grant</u>	<u>Weighted Average Exercise Price of Options Outstanding</u>	<u>Weighted Average Remaining Contractual Term of Options Outstanding (Years)</u>	<u>Aggregate Intrinsic Value (in thousands)</u>
1,631,322	1,996,322	\$9.16	8.20	\$879

No restricted stock or restricted stock unit awards (or other such “full-value” awards) were outstanding as of March 31, 2021.

Without the Plan Increase, we will not have sufficient shares available for grant under the 2015 Plan to make option grants to our executive officers at market-based, competitive levels in 2021, to make annual grants to our non-employee directors at market-based, competitive levels in 2021 or to make grants to new hires or in connection with promotions in 2021 at market-based, competitive levels until such time as we can obtain stockholder approval for an increase in shares for the 2015 Plan. If the requested Plan Increase is not approved, we believe that we would be forced to rely on providing higher levels of cash compensation or cash-settled awards for a portion of our incentive-based compensation in order to retain our most experienced and skilled employees and to attract new employees, which we believe would put us at a significant competitive disadvantage in our industry and would not be in our stockholders’ best interests as it would remove incentives aligning the interests of our employees and our senior leaders with those of our stockholders to drive company-wide performance and create long-term stockholder value. Given that equity awards and in particular stock options are a critical part of the compensation at pharmaceutical companies of our stage and type, this would also put us in significant jeopardy of losing key employees and executive officers, and make it much more difficult for us to attract and retain new employees and executive officers, at a time when we are attempting to rebuild, pivot and grow our company after the Quellis Acquisition and February 2021 Financing, all of which would be against our stockholders’ best interests.

In determining the amount of the proposed Plan Increase amount, we considered several factors, including the number of options shares needed for 2021 grants to our executive officers, non-employee directors, newly hired and promoted employees at market-based, competitive levels, which we estimated at approximately 5% of our fully diluted outstanding stock. If stockholders approve the Plan Increase, we will have 1,937,322 shares of common stock available for issuance pursuant to future awards under the 2015 Plan, after reflecting the April 2021 Grants to executive officers and our other officers, and the planned 2021 option grants (for an aggregate 670,000 options) to our non-employee directors, as discussed below under “—Plan Benefits.” Given our projected utilization, we expect that this number of shares available for issuance will meet our grant needs for 2021.

#### **Vote Required and Recommendation of the Board of Directors**

To be approved, this proposal requires the affirmative vote of the majority of the shares of common stock present or represented by proxy and voted “for” or “against” the proposal. Abstentions and broker non-votes with respect to this proposal will be counted for purposes of establishing a quorum and, if a quorum is present, abstentions and broker non-votes will have no effect on the outcome of the vote on this proposal.



We believe that the 2015 Plan and the Plan Increase will serve a critical role in attracting and retaining the high caliber employees essential to our success and in motivating these individuals to strive to enhance our growth and profitability. Therefore, our Board of Directors urges you to vote to approve the Plan Increase Proposal.

Our directors and executive officers have an interest in this proposal by virtue of their being eligible to receive equity awards under the 2015 Plan. In addition, our Board of Directors has approved stock option grants under the 2015 Plan to our executive officers that are contingent upon Required Stockholder Approval, and further intends to grant certain stock options under the 2015 Plan to our non-employee directors if the Plan Increase Proposal is approved, as described below under “—Plan Benefits”. If the Plan Increase Proposal is approved, we plan to file a registration statement on Form S-8 with the SEC to register the additional shares of common stock authorized under the 2015 Plan by the Plan Increase.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS VOTE “FOR” THE PLAN INCREASE PROPOSAL.**

**Summary of the 2015 Plan as Amended by the Plan Increase**

The following summary of the 2015 Plan assumes and gives effect to stockholder approval of the Plan Increase Proposal and is qualified in its entirety by the specific language of the 2015 Plan, as amended by the Plan Increase, which is set forth in Appendix B to this proxy statement, with the proposed new text underlined, bolded and italicized and the proposed deleted text marked as struck out.

**Purpose.** The purpose of the 2015 Plan is to advance the interests of our stockholders by enhancing our ability to attract, retain and motivate persons who are expected to make important contributions to our company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align the interests of such persons with those of our stockholders.

**Eligibility.** All of our employees, officers and directors, as well as consultants and advisors to our company, are eligible to be granted awards under the 2015 Plan; however, incentive stock options may only be granted to our employees.

**Shares Available for Awards.** An aggregate of 9,372,248 shares of our common stock will be authorized for issuance under the 2015 Plan after giving effect to the Plan Increase, of which (i) 1,631,322 shares were subject to outstanding awards as of March 31, 2021, (ii) 4,989,000 shares were subject to the April 2021 Grants (including shares underlying April 2021 Annual Grants to our executive officers and our other officers that are contingent upon Required Stockholder Approval but excluding the grant to Dr. Donovan that will be forfeited on April 23, 2021, her last day of employment), (iii) 670,000 shares are expected to be subject to stock options to be granted to our non-employee directors in connection with the Annual Meeting if the Plan Increase Proposal is approved, and (iv) 1,937,322 shares are expected to be available for grant of future awards. To the extent awards outstanding under our 2008 Plan expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by us at their original issuance price pursuant to a contractual repurchase right, they will increase the number of shares authorized for issuance under the 2015 Plan, subject to certain limitations specified in the 2015 Plan.

All shares of our common stock covered by SARs are counted against the number of shares available for the grant of awards under the 2015 Plan; provided, however, that (i) SARs that may be settled only in cash will not be so counted and (ii) if we grant a SAR in tandem with an option for the same number of shares of common stock and provide that only one such award may be exercised (a “Tandem SAR”), only the shares covered by the option, and not the shares covered by the Tandem SAR, will be so counted, and the expiration of one in connection with the other’s exercise will not restore shares to the 2015 Plan.

If any award under the 2015 Plan (i) expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of common stock subject to such award being repurchased by us at the original issuance price pursuant to a contractual repurchase right) or (ii) results in any common stock not being issued, the unused common stock covered by such award will again be available for the grant of awards under the 2015 Plan, subject to specified limitations. Shares of common stock delivered (by actual delivery, attestation, or net exercise) to us by a plan participant to (1) purchase shares of common stock upon the exercise of an award or (2) satisfy tax

withholding obligations (including shares retained from the award creating the tax obligation) will not be added back to the number of shares available for the future grant of awards. The 2015 Plan provides that shares of common stock repurchased by us on the open market using the proceeds from the exercise of an award will not increase the number of shares available for future grants of awards.

In connection with a merger or consolidation of an entity with our company or the acquisition by us of property or stock of an entity, our Board of Directors may grant awards under the 2015 Plan in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof. Such substitute awards may be granted on such terms as our Board of Directors deems appropriate in the circumstances, notwithstanding any limitations on awards contained in the 2015 Plan. Such substitute awards will not count against the overall share limit under the 2015 Plan, except as may be required by reason of Section 422 and related provisions of the Code and the regulations thereunder.

**Plan Administration.** Our Board of Directors administers the 2015 Plan and has authority to grant awards and to adopt, amend and repeal the administrative rules, guidelines and practices relating to the 2015 Plan and to construe and interpret the terms of the plan and any award agreements entered into under the plan. Our Board of Directors may correct any defect, supply any omission or reconcile any inconsistency in the 2015 Plan or any award under the plan in the manner and to the extent it deems expedient and it is the sole and final judge of such expediency. All decisions by our Board of Directors are made in the board's sole discretion and are final and binding on all persons having or claiming any interest in the 2015 Plan or in any award under the plan.

Our Board of Directors may delegate any or all of its powers under the 2015 Plan to one or more committees or subcommittees of the Board of Directors. Our Board of Directors has authorized its compensation committee to administer the 2015 Plan, including delegation to the compensation committee of the authority to interpret the terms of the 2015 Plan, to grant options thereunder and to make stock awards thereunder; provided, however, that, the compensation committee is not authorized to amend the 2015 Plan. Our Board of Directors may also delegate authority to an executive officer to grant awards under the 2015 Plan to employees other than executive officers, provided that the Board of Directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards (or a formula for establishing such price), and the maximum number of shares subject to awards that such executive officer may make. All references that we make to our Board of Directors in this summary of the 2015 Plan are also intended to include reference to any committee or subcommittee of the Board of Directors or officer to whom our Board of Directors has delegated authority under the 2015 Plan.

**Types of Awards.** The 2015 Plan authorizes the award of stock options, SARs, restricted stock awards, restricted stock units and other stock-based awards.

**Stock Options.** Stock options entitle the holder to purchase a specified number of shares of common stock at a specified exercise price, subject to such other terms and conditions as are specified in connection with the option grant. The 2015 Plan allows for the grant of nonqualified stock options as well as incentive stock options, which qualify under Section 422 of the Code and may be granted only to our employees or employees of any parent or subsidiary of ours. The exercise price of incentive stock options and nonqualified stock options granted under the 2015 Plan will not be less than the fair market value of a share of our common stock on the date of grant. The maximum term of options granted under 2015 Plan is ten years.

**Stock Appreciation Rights.** SARs entitle the holder, upon exercise, to receive an amount of common stock or cash or a combination thereof determined by reference to appreciation, from and after the date of grant, in the fair market value of our common stock over the measurement price of the SAR. The per share measurement price of a SAR granted under the 2015 Plan may not be less than the fair market value of a share of our common stock on the date of grant. The maximum term of SARs granted under 2015 Plan is ten years.

**Restricted Stock Awards.** Restricted stock awards entitle the recipient to acquire shares of common stock subject to our right to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeitures of such shares if issued at no cost) from the recipient in the event that conditions specified in the applicable award are not satisfied prior to the end of the applicable restriction period or periods specified in the award.

**Restricted Stock Units.** Restricted stock units entitle the recipient to receive such number of shares of common stock or (if so provided in the applicable award agreement) an amount of cash equal to the fair market value of such number of shares of common stock as are set forth in the applicable award agreement.

**Other Stock-Based Awards.** The 2015 Plan authorizes other awards of shares of common stock and other awards that are valued in whole or in part by reference to, or are otherwise based on, shares of common stock or other property, having such terms and conditions as our Board of Directors may determine (“Other Stock-Based Awards”). Other Stock-Based Awards are available as a form of payment in the settlement of other awards granted under the 2015 Plan or as payment in lieu of compensation to which a participant under the plan is otherwise entitled. Other Stock-Based Awards may be paid in shares of common stock or cash, as our Board of Directors may determine.

**Limitation on Repricing of Stock Options and SARs.** With respect to stock options and SARs, unless such action is approved by our stockholders or otherwise permitted under the terms of the 2015 Plan as an equitable adjustment in connection with certain changes in capitalization and reorganization events as described below, we may not (i) amend any outstanding stock option or SAR granted under the plan to provide an exercise or measurement price per share that is lower than the then-current exercise or measurement price per share of such outstanding stock option or SAR, (ii) cancel any outstanding stock option or SAR (whether or not granted under the plan) and grant in substitution therefor new awards under the plan (other than certain substitute awards described above) covering the same or a different number of shares of common stock and having an exercise or measurement price per share lower than the then-current exercise or measurement price per share of the cancelled stock option or SAR, (iii) cancel in exchange for a cash payment any outstanding stock option or SAR with an exercise or measurement price per share above the then-current fair market value of a share of our common stock or (iv) take any other action under the plan that constitutes a “repricing” within the meaning of the rules of Nasdaq.

**Restrictions on Dividends and Dividend Equivalents.** The 2015 Plan prohibits the payment of dividends or dividend equivalents with respect to unvested awards and the accrual of dividend equivalents with respect to stock options and SARs.

**Equitable Adjustments.** In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event (including the Reverse Stock Split), or any dividend or distribution to holders of our common stock other than an ordinary cash dividend, we are required by the 2015 Plan to make equitable adjustments (or make substitute awards, if applicable), in a manner determined by our Board of Directors, to:

- the number and class of securities available under the 2015 Plan;
- the share counting rules under the 2015 Plan;
- the number and class of securities and exercise price per share of each outstanding option;
- the share and per-share provisions and measurement price of each outstanding SAR;
- the number of shares and the repurchase price per share subject to each outstanding restricted stock award or restricted stock unit award; and
- the share and per-share related provisions and purchase price, if any, of any outstanding Other Stock-Based Award.

Upon a merger or other reorganization event (as defined in the 2015 Plan), our Board of Directors, may, on such terms as our Board of Directors determines (except to the extent specifically provided otherwise in an applicable award agreement or other agreement between the plan participant and us), take any one or more of the following actions pursuant to the 2015 Plan, as to some or all outstanding awards, other than restricted stock awards:

- provide that all outstanding awards will be assumed or substantially equivalent awards will be substituted by the successor corporation (or an affiliate thereof);

- upon written notice to a participant, provide that the participant's unexercised awards will terminate immediately prior to the consummation of such transaction unless exercised by the participant within a specified period following the date of such notice;
- provide that outstanding awards will become exercisable, realizable or deliverable, or restrictions applicable to outstanding awards will lapse, in whole or in part, prior to or upon the reorganization event;
- in the event of a reorganization event pursuant to which holders of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to the participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for the termination of such award;
- provide that, in connection with a liquidation or dissolution, awards convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings); or
- any combination of the foregoing.

Our Board of Directors is not obligated by the 2015 Plan to treat all awards, all awards held by a participant or all awards of the same type, identically.

In the case of certain restricted stock units, no assumption or substitution is permitted, and the restricted stock units will instead be settled in accordance with the terms of the applicable restricted stock unit agreement.

Upon the occurrence of a reorganization event other than a liquidation or dissolution, the repurchase and other rights under each outstanding restricted stock award will continue for the benefit of the successor company and will, unless our Board of Directors may otherwise determine, apply to the cash, securities or other property which our common stock is converted into or exchanged for pursuant to the reorganization event, unless our Board of Directors provided for the termination or deemed satisfaction of such repurchase or other rights under the restricted stock award agreement or any other agreement between the participant and us. Upon the occurrence of a reorganization event involving a liquidation or dissolution, all restrictions and conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award or in any other agreement between the participant and us.

**Transferability.** Subject to limited exceptions specified in the 2015 Plan, awards under the 2015 Plan may not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an incentive stock option, pursuant to a qualified domestic relations order, and, during the life of the plan participant, are exercisable only by the plan participant.

**Acceleration.** Our Board of Directors may at any time provide that any award under the 2015 Plan will become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

**Amendment, Term and Termination.** Our Board of Directors may amend, suspend or terminate the 2015 Plan at any time, except that stockholder approval will be required to comply with applicable law or stock market requirements. No award may be granted under the 2015 Plan after June 23, 2025.

#### **U.S. Federal Income Tax Consequences**

The following summary is intended only as a general guide to the U.S. federal income tax consequences of participation in the 2015 Plan and does not attempt to describe all possible federal or other tax consequences of such participation or tax consequences based on particular circumstances.

***Incentive Stock Options.*** An optionee who is granted an incentive stock option does not recognize taxable income at the time the option is granted or upon its exercise, although the exercise may subject the optionee to the alternative minimum tax. Upon a disposition of the shares more than two years after grant of the option and one year after exercise of the option, any gain or loss is treated as long-term capital gain or loss. If these holding periods are not satisfied, the optionee recognizes ordinary income at the time of disposition equal to the difference between the exercise price and the lower of (i) the fair market value of the shares at the date of the option exercise or (ii) the sale price of the shares. Any gain or loss recognized on such a premature disposition of the shares to the extent not recognized as taxable income as provided above, will be long-term or short-term capital gain or loss, depending on the holding period.

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

***Stock Appreciation Rights.*** A holder of a SAR does not recognize taxable income at the time he or she is granted a SAR. Upon exercise, the participant will recognize ordinary income in an amount equal to the amount of cash received and the fair market value of the shares received, and if granted to an employee, tax withholding is generally due. Any additional gain or loss recognized upon any later disposition of the shares would be capital gain or loss, depending on the holding period. We generally should be entitled to a deduction equal to the amount of ordinary income recognized by the participant.

***Restricted Stock.*** A participant acquiring restricted stock generally will recognize ordinary income equal to the fair market value of the shares on the date our right of repurchase lapses (i.e. the date the award vests). If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. The participant may elect, pursuant to Section 83(b) of the Code, to have the date of acquisition of the shares be a date earlier than the date our repurchase rights lapses, provided such election is made no later than 30 days after the participant acquires the shares. Upon the sale of shares acquired pursuant to a restricted stock award pursuant to which an election pursuant to Section 83(b) of the Code has been made, any gain or loss, based on the difference between the sale price and the fair market value on the determination date, will be taxed as short term or long term capital gain or loss, depending on the holding period. Any taxable income recognized in connection with the grant of restricted stock by our employee is subject to tax withholding by us. The Company generally should be entitled to a deduction equal to the amount of ordinary income recognized by the participant.

***Restricted Stock Units.*** A participant generally will recognize no income upon the grant of a restricted stock unit. Upon the settlement and/or payment of restricted stock units, participants normally will recognize ordinary income in the year of receipt in an amount equal to the cash received and the fair market value of any nonrestricted shares received. If the participant is an employee, such ordinary income generally is subject to withholding taxes. Upon the sale of any shares received, any gain or loss, based on the difference between the sale price and the fair market value will be taxed as capital gain or loss, depending on the holding period. We generally should be entitled to a deduction equal to the amount of ordinary income recognized by the participant.

## **Plan Benefits**

As of March 31, 2021, 18 employees, six non-employee consultants, and seven non-employee directors participated in the 2015 Plan and all of our current and future employees, consultants and non-employee directors are eligible to participate in the 2015 Plan. On March 31, 2021, the closing price of our common stock on the Nasdaq Global Market was \$2.89 per share. The granting of awards under the 2015 Plan is discretionary, and, with the exception of awards approved contingent upon stockholder approval of the Plan Increase Proposal (as described below), we cannot now determine with certainty the number or type of awards to be granted in the future to any particular person or group.

The following table sets forth the option grants from the April 2021 Grants that are contingent upon Required Stockholder Approval. As a result of her resignation as our Chief Medical Officer, effective as of April 23, 2021, Dr. Donovan forfeited the grant we made to her in April 2021 and such option is not reflected in the table below. Should Required Stockholder Approval not be obtained, these grants will be automatically forfeited. In addition, our Board of Directors has determined that, subject to stockholder approval of the Plan Increase Proposal, for 2021 each non-employee director will receive, in lieu of the regular annual grant of options under our director compensation program, a stock option to purchase 100,000 shares subject to vesting over three years (equivalent to an initial appointment grant), with the exception of Dr. Violin and Mr. Callori, who would each receive a stock option to purchase 85,000 shares in light of each of them having received initial appointment grants of options to purchase 15,000 shares in connection with their appointments to our Board of Directors in January 2021. These anticipated grants are also reflected in the “All current directors who are not executive officers, as a group” row of the following table.

Option Grants subject to Required Stockholder Approval or Approval of the Plan Increase Proposal

<u>Name and Position</u>	<u>Number of Shares Subject to Stock Options</u>
<b>Named Executive Officers</b>	
Jill C. Milne, Ph.D. <i>President and Chief Executive Officer</i>	1,400,000
Andrew Nichols, Ph.D. <i>Chief Scientific Officer</i>	600,000
Current executive officers who are not Named Executive Officers	1,600,000
<b>All current executive officers as a group</b>	<b>3,600,000</b>
<b>All current directors who are not executive officers, as a group</b>	<b>670,000</b>
<b>All employees who are not executive officers, as a group</b>	<b>800,000</b>

Options outstanding under the 2015 Plan as of March 31, 2021

Since the adoption of the 2015 Plan through March 31, 2021, we have granted the following stock options under the 2015 Plan to the individuals and groups listed below. In all cases, the securities underlying such stock options were shares of our common stock. As of the date hereof, we have granted only stock options and no other type of award under the 2015 Plan.

<u>Name and Position</u>	<u>Number of Shares Subject to Stock Options(1)</u>
<b>Named Executive Officers</b>	
Jill C. Milne, Ph.D. <i>President and Chief Executive Officer</i>	346,800
Joanne M. Donovan, M.D., Ph.D. <i>Chief Medical Officer</i>	146,100
Andrew Nichols, Ph.D. <i>Chief Scientific Officer</i>	142,900
Current executive officers who are not Named Executive Officers	212,700
<b>All current executive officers as a group</b>	<b>848,500</b>
<b>All current directors who are not executive officers, as a group</b>	<b>134,659</b>
<b>All non-employee participants in the plan(2)</b>	<b>370,016</b>
<b>All employees who are not executive officers, as a group(3)</b>	<b>569,465</b>

(1) The table above does not include 48,892 options outstanding as of March 31, 2021 under the 2008 Plan.

- (2) Includes 7,000 shares subject to stock options that were issued upon exercise and 18,359 shares subject to stock options that have expired without being exercised.
- (3) Includes 291 shares subject to stock options that were issued upon exercise and 314,560 shares subject to stock options that have expired without being exercised.

### SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table contains information about our equity compensation plans as of December 31, 2020:

<u>Plan category</u>	<u>Number of securities to be issued upon exercise of outstanding stock options, warrants and rights</u>	<u>Weighted- average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</u>
	(a)	(b)	(c)
Equity compensation plans approved by security holders	1,367,667(1)	\$11.38	2,085,124(2)
Equity compensation plans not approved by security holders	—	—	—
<b>Total</b>	<u>1,367,667</u>	<u>\$11.38</u>	<u>2,085,124</u>

(1) Consists of stock options outstanding as of December 31, 2020 under the 2008 Plan and 2015 Plan.

(2) Consists of shares issuable under our 2015 Plan and our 2015 Employee Stock Purchase Plan, but does not reflect an automatic increase that was effective as of January 1, 2021 of 36,470 shares under the 2015 Employee Stock Purchase Plan. Our 2015 Employee Stock Purchase Plan provides for further annual increases, to be added as of the first day of each fiscal year, from January 1, 2022 until, and including, January 1, 2026, in an amount equal to the least of 36,470 shares of our common stock, 1% of the total number of shares of our common stock outstanding on the first day of the applicable year, and an amount determined by our board of directors.

In January 2021, in connection with the Quellis Acquisition, we assumed certain options that were outstanding under the Quellis Biosciences, Inc. 2019 Stock Incentive Plan. Each option to purchase shares of Quellis' common stock that was outstanding and unexercised immediately prior to the effective time of the Quellis Acquisition, whether or not vested, was converted into and became an option to purchase shares of our common stock. As of March 31, 2021, there were 332,494 shares of common stock reserved for issuance pursuant to such assumed options.



**PROPOSAL NO. 5—RATIFICATION OF THE APPOINTMENT OF ERNST & YOUNG LLP  
AS CATABASIS' INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE  
FISCAL YEAR ENDING DECEMBER 31, 2021**

Our stockholders are being asked to ratify the appointment by the audit committee of the Board of Directors of Ernst & Young LLP as our independent registered public accounting firm. Ernst & Young LLP has served as the company's independent registered public accounting firm since 2010.

The audit committee is solely responsible for selecting our independent registered public accounting firm for the fiscal year ending December 31, 2021. Stockholder approval is not required to appoint Ernst & Young LLP as our independent registered public accounting firm. However, the Board of Directors believes that submitting the appointment of Ernst & Young LLP to the stockholders for ratification is good corporate governance. If the stockholders do not ratify this appointment, the audit committee will reconsider whether to retain Ernst & Young LLP. If the selection of Ernst & Young LLP is ratified, the audit committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time it decides that such a change would be in the best interest of Catabasis and its stockholders.

A representative of Ernst & Young LLP is expected to attend the virtual Annual Meeting and will have an opportunity to make a statement if he or she desires to do so and to respond to appropriate questions from our stockholders.

The following table summarizes the fees Ernst & Young LLP, our independent registered public accounting firm, billed to us for each of the last two fiscal years.

	Year Ended December 31,	
	2020	2019
Audit Fees(1)	\$566,500	\$582,000
Audit-Related Fees(2)	—	—
Tax Fees(3)	12,875	12,875
All Other Fees(4)	—	—
<b>Total</b>	<b>\$579,375</b>	<b>\$594,875</b>

- (1) Audit fees consist of fees billed for professional services performed by Ernst & Young LLP for the audit of our annual consolidated financial statements, the review of interim consolidated financial statements, and related services that are normally provided in connection with registration statements.
- (2) Audit-related fees may consist of fees billed by an independent registered public accounting firm for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements. There were no such fees incurred in 2020 or 2019.
- (3) Tax fees may consist of fees for professional services, including tax consulting and compliance performed by an independent registered public accounting firm.
- (4) There were no such fees incurred in 2020 or 2019.

All such accountant services and fees for 2020 were pre-approved by our audit committee in accordance with the "Pre-Approval Policies and Procedures" described below.

**Pre-approval Policy and Procedures**

Our Board of Directors adopted policies and procedures for the pre-approval of audit and non-audit services for the purpose of maintaining the independence of our independent auditor. We may not engage our independent auditor to render any audit or non-audit service unless either the service is approved in advance by the audit committee, or the engagement to render the service is entered into pursuant to the

audit committee's pre-approval policies and procedures. Notwithstanding the foregoing, pre-approval is not required with respect to the provision of services, other than audit, review or attest services, by the independent auditor if the aggregate amount of all such services is no more than 5% of the total amount paid by us to the independent auditor during the fiscal year in which the services are provided, such services were not recognized by us at the time of the engagement to be non-audit services and such services are promptly brought to the attention of the audit committee and approved prior to completion of the audit by the audit committee.

From time to time, our audit committee may pre-approve services that are expected to be provided to us by the independent auditor during the following 12 months. At the time such pre-approval is granted, the audit committee must identify the particular pre-approved services in a sufficient level of detail so that our management will not be called upon to make a judgment as to whether a proposed service fits within the pre-approved services and, at each regularly scheduled meeting of the audit committee following such approval, management or the independent auditor will report to the audit committee regarding each service actually provided to us pursuant to such pre-approval.

During our 2020 fiscal year, no services were provided to us by Ernst & Young LLP or any other accounting firm other than in accordance with the pre-approval policies and procedures described above.

**Vote Required and Board of Directors Recommendation**

The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm requires the affirmative vote of the majority of the shares of common stock present or represented by proxy and voted "for" or "against" such matter.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE RATIFICATION OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM.**

### PROPOSAL NO. 6—ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are providing our stockholders the opportunity to vote to approve, on a non-binding advisory basis, the compensation of our named executive officers as disclosed in this proxy statement in accordance with the SEC’s rules. This proposal, which is commonly referred to as “say-on-pay,” is required by Section 14A to the Exchange Act. Section 14A of the Exchange Act also requires that stockholders have the periodic opportunity to cast an advisory vote with respect to whether future executive compensation advisory votes will be held every one, two or three years, which is the subject of Proposal No. 7.

Our executive compensation programs are designed to attract and retain key executive officers critical to our long-term success, to recognize and reward overall company performance and each executive officer’s individual performance and level of responsibility, as well as to align our executive officers’ incentives with stockholders’ interests. Under these programs, our named executive officers are rewarded for the achievement of key strategic and business goals. The programs consist of a combination of base salary, annual cash bonus, long-term equity incentive compensation and other employee benefits generally available to our employees. The “Executive Compensation” section of this proxy statement beginning on page 23 describes in detail our executive compensation programs and the decisions made by the compensation committee and our Board of Directors with respect to the fiscal year ended December 31, 2020.

Our Board of Directors is asking stockholders to approve, on a non-binding advisory basis, the following resolution:

RESOLVED, that the compensation paid to Catabasis’s named executive officers, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the compensation tables and any related material disclosed in this proxy statement, is hereby approved.

As an advisory vote, this proposal is not binding. The outcome of this advisory vote does not overrule any decision by us or our Board of Directors (or any committee thereof), create or imply any change to our fiduciary duties or those of our Board of Directors (or any committee thereof), or create or imply any additional fiduciary duties for us or our Board of Directors (or any committee thereof). However, our compensation committee and Board of Directors value the opinions expressed by our stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for named executive officers.

#### Vote Required and Board of Directors Recommendation

The approval, by non-binding advisory vote, of our executive compensation requires the affirmative vote of the majority of the shares of common stock present or represented by proxy and voted “for” or “against” such matter.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE TO APPROVE, ON AN ADVISORY BASIS, THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS BY VOTING “FOR” THIS PROPOSAL.**

**PROPOSAL NO. 7—ADVISORY VOTE ON THE FREQUENCY OF FUTURE ADVISORY VOTES ON EXECUTIVE COMPENSATION**

We are asking our stockholders to cast a non-binding advisory vote regarding the frequency of future executive compensation advisory votes. Stockholders may vote for a frequency of every one, two, or three years, or may abstain.

Our Board of Directors will take into consideration the outcome of this vote in making a determination about the frequency of future executive compensation advisory votes. However, because this vote is advisory and non-binding, our Board of Directors may decide that it is in the best interests of our stockholders and our company to hold the advisory vote to approve executive compensation more or less frequently. In the future, we will propose an advisory vote on the frequency of future executive compensation advisory votes at least once every six calendar years.

After careful consideration, our Board of Directors believes that an executive compensation advisory vote should be held every year, and therefore our Board of Directors recommends that you vote for a frequency of every **1 YEAR** for future executive compensation advisory votes.

Our Board of Directors believes that an annual executive compensation advisory vote will facilitate more direct stockholder input about executive compensation. An annual executive compensation advisory vote is consistent with our policy of reviewing our compensation program annually, as well as seeking input from our stockholders on corporate governance and executive compensation matters. We believe an annual vote would be the best governance practice for our company at this time.

**Vote Required and Board of Directors Recommendation**

The approval, by non-binding advisory vote, of the frequency of future executive compensation advisory votes requires the affirmative vote of the majority of the shares of common stock present or represented by proxy and voted for “1 year” “2 years” or “3 years”. With respect to this proposal, if none of the frequency options (1 year, 2 years or 3 years) receives a majority vote, we will consider the frequency that receives the highest number of votes cast by stockholders to be the frequency that has been approved by stockholders.

**OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR, ON AN ADVISORY BASIS, A FREQUENCY OF EVERY “1 YEAR”.**

## PRINCIPAL STOCKHOLDERS

The following table sets forth information, to the extent known by us or ascertainable from public filings, with respect to the beneficial ownership of our common stock as of March 31, 2021 by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our directors and our director nominees;
- each of our NEOs; and
- all of our current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include shares of common stock issuable upon the exercise of stock options that are immediately exercisable or exercisable within 60 days after March 31, 2021. Except as otherwise indicated, all of the shares reflected in the table are shares of common stock and all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to community property laws, where applicable. The information is not necessarily indicative of beneficial ownership for any other purpose.

The percentage ownership calculations for beneficial ownership are based on 23,417,006 shares of common stock outstanding as of March 31, 2021. Except as otherwise indicated in the table below, addresses of named beneficial owners are in care of Catabasis Pharmaceuticals, Inc., 100 High Street, Suite 2800, Boston, MA 02110.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options held by that person that are currently exercisable or exercisable within 60 days after March 31, 2021. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

<u>Name of Beneficial Owner</u>	<u>Number of Shares Beneficially Owned</u>	<u>Percentage of Shares Beneficially Owned</u>
<b>5% Stockholders</b>		
Affiliates of Perceptive Advisors, LLC(1)	2,476,924	10.6%
Affiliates of Federated Investment Management Company(2)	1,562,500	6.7%
BlackRock, Inc.(3)	1,166,782	5.0%
<b>NEOs and Directors</b>		
Jill C. Milne, Ph.D.(4)	236,981	*
Joanne M. Donovan, Ph.D., M.D.(5)	96,893	*
Andrew Nichols, Ph.D.(6)	89,164	*
Kenneth Bate(7)	12,297	*
Frederick Callori	—	*
Hugh Cole(8)	5,000	*
Michael D. Kishbauch(9)	10,850	*
Gregg LaPointe(10)	10,000	*
Joanne Beck(11)	10,000	*
Jonathan Violin	—	*
All current executive officers and directors as a group (13 persons)(12)	532,610	2.2%

\* Represents beneficial ownership of less than 1% of our outstanding stock.

- (1) Consists of 2,476,924 shares of common stock beneficially owned by Perceptive Advisors LLC (“Perceptive Advisors”), Joseph Edelman (“Mr. Edelman”), Perceptive Life Sciences Master Fund, Ltd. (the “Master Fund”), Perceptive Xontogeny Venture Fund, L.P. (“Perceptive Xontogeny”) and Xontogeny, LLC (“Xontogeny”, and together with Perceptive Advisors, Mr. Edelman, the Master Fund and Perceptive Xontogeny. Perceptive Xontogeny Ventures GP, LLC (“GP”) is the general partner of Perceptive Xontogeny. C2 Ventures, LLC is the manager of Perceptive XV Holdings, LLC (“Holdings”), the manager of Xontogeny. Perceptive Advisors serves as the investment advisor to the Master Fund and Perceptive Xontogeny, and Mr. Edelman is the managing member of Perceptive Advisors, Holdings, and GP. The address of the principal business office of each of foregoing persons is 51 Astor Place 10th Floor, New York, NY 10003. The foregoing information and the information in the table above is based on a Schedule 13D filed with the SEC on February 8, 2021 that reported beneficial ownership as of January 28, 2021.
- (2) Consists of 1,562,500 shares of common stock beneficially owned by registered investment companies and separate accounts advised by subsidiaries of Federated Hermes, Inc. (the “Parent”) that have been delegated the power to direct investment and power to vote the securities by the registered investment companies’ board of trustees or directors and by the separate accounts’ principals. All of the voting securities of Federated are held in the Voting Shares Irrevocable Trust (“Trust”), the trustees of which are Thomas R. Donahue, Rhodora J. Donahue and J. Christopher Donahue (collectively, the “Trustees”). Federated and the Trust each reported sole voting and dispositive power, and the Trustees reported shared voting and dispositive power, with respect to the shares of common stock owned by the registered investment companies and separate accounts advised by subsidiaries of Federated, however they expressly disclaimed that they were the beneficial owners of such shares. The address for each of the foregoing persons and entities is 1001 Liberty Avenue, Pittsburgh, PA 15222-3779. The foregoing information and the information in the table above is based on a Schedule 13G filed with the SEC on February 12, 2021 that reported beneficial ownership as of December 31, 2021.
- (3) Consists of 1,166,782 shares of common stock held by BlackRock, Inc. (“BlackRock”), of which BlackRock 1,156,950 has the sole power to vote or to direct the vote and of which 1,166,782 has sole power to dispose or to direct the disposition. This information is from a Schedule 13G filed by BlackRock on February 2, 2021. The address for BlackRock is 55 East 52nd Street, New York, NY 10055.
- (4) Includes 210,719 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (5) Includes 96,853 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (6) Consists of 89,164 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (7) Consists of 12,297 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (8) Consists of 5,000 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (9) Consists of 10,850 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (10) Consists of 10,000 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (11) Consists of 10,000 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.
- (12) Includes 506,308 shares of common stock issuable upon the exercise of options exercisable within 60 days after March 31, 2021.

## **CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS**

The following is a description of transactions since January 1, 2019 to which we have been a party, and in which any of our directors, executive officers or beneficial owners of more than 5% of our voting securities, or affiliates or immediate family members of any of our directors, executive officers or beneficial owners of more than 5% of our voting securities, had or will have a direct or indirect material interest. We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, from unrelated third parties.

### **Quellis Acquisition and February 2021 Financing**

Upon the closing of the Quellis Acquisition, entities associated with Perceptive Advisors became beneficial owners of more than 5% of our voting securities. Concurrently, one of these entities, Perceptive Xontogeny Ventures, L.P. (“PXV”), and another affiliated entity entered into the stock purchase agreement relating to the February 2021 Financing. Upon the closing of the February 2021 Financing on February 1, 2021, Perceptive Life Sciences Master Fund Ltd. purchased 4,851 shares of Series X Preferred Stock at a purchase price of \$3,009.53 per share, for an aggregate purchase price of \$15,001,863.03, and PXV purchased 1,617 shares of Series X Preferred Stock at a purchase price of \$3,009.53 per share, for an aggregate purchase price of \$500,621.01.

### **Underwritten Financings**

On February 3, 2020, we closed an underwritten public offering of 5,290,000 shares of common stock at a public offering price of \$5.00 per share, including 690,000 shares issued upon the exercise in full by the underwriter of its over-allotment option (the “January 2020 Financing”). In the January 2020 Financing, entities affiliated with Federated Hermes, Inc. (“Federated”) a beneficial owner of more than 5% of our voting securities, purchased 925,000 shares of common stock through the underwriters at the public offering price for an aggregate purchase price of \$4.6 million. An entity affiliated with Corriente Advisors, LLC (“Corriente Advisors”), a beneficial owner of more than 5% of our voting securities, purchased 235,000 shares of common stock through the underwriters at the public offering price for an aggregate purchase price of \$1.2 million.

On February 8, 2019, we closed an underwritten public offering of 4,000,000 units at a public offering price of \$5.00 per unit, with each unit comprised of one share of common stock and half of a warrant to purchase one share of common stock at an exercise price of \$6.25 per share (the “February 2019 Financing”). In the February 2019 Financing, Armistice Capital Master Fund Ltd., a beneficial owner of more than 5% of our voting securities at the time, purchased 840,000 units through the underwriters at the public offering price for an aggregate purchase price of \$4.2 million. Stonepine Capital, L.P., a beneficial owner of more than 5% of our voting securities at the time, purchased 300,000 units through the underwriters at the public offering price for an aggregate purchase price of \$1.5 million. Entities affiliated with Federated, a beneficial owner of more than 5% of our voting securities, purchased 1,125,000 units through the underwriters at the public offering price for an aggregate purchase price of \$5.6 million, Corriente Advisors, a beneficial owner of more than 5% of our voting securities, purchased 175,000 units through the underwriters at the public offering price for an aggregate purchase price of \$0.9 million.

### **Employment, Severance and Change in Control Agreements**

See “Executive Compensation—Employment Agreements, Severance and Change in Control Arrangements” above for a discussion of these arrangements.

### **Indemnification of Officers and Directors**

Our certificate of incorporation provides that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. In addition, we have entered into indemnification agreements with each of our directors and executive officers that may be broader in scope than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements require us, among other things, to indemnify each such director and executive officer for some expenses, including

attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors or executive officers. In addition, we maintain standard policies of insurance under which coverage is provided to our directors and officers against losses arising from claims made by reason of breach of duty or other wrongful act, and to us with respect to payments which may be made by us to such directors and officers pursuant to the above indemnification provisions or otherwise as a matter of law.

### **Policies and Procedures for Related Person Transactions**

Our Board of Directors has adopted a written related person transaction policy to set forth policies and procedures for the review and approval or ratification of related person transactions. This policy covers any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we were or are to be a participant, the amount involved exceeds \$120,000, and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person.

Our related person transaction policy contains exceptions for any transaction or interest that is not considered a related person transaction under SEC rules as in effect from time to time. In addition, the policy provides that an interest arising solely from a related person's position as an executive officer of another entity that is a participant in a transaction with us will not be subject to the policy if each of the following conditions is met:

- the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity;
- the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction with us and do not receive any special benefits as a result of the transaction; and
- the amount involved in the transaction equals less than the greater of \$200,000 or 5% of the annual gross revenue of the company receiving payment under the transaction.

The policy provides that any related person transaction proposed to be entered into by us must be reported to our chief legal officer or chief financial officer and will be reviewed and approved by our audit committee in accordance with the terms of the policy, prior to effectiveness or consummation of the transaction whenever practicable. The policy provides that if our chief legal officer or chief financial officer determines that advance approval of a related person transaction is not practicable under the circumstances, our audit committee will review and, in its discretion, may ratify the related person transaction at the next meeting of the audit committee. The policy also provides that alternatively, our chief legal officer or chief financial officer may present a related person transaction arising in the time period between meetings of the audit committee to the chair of the audit committee, who will review and may approve the related person transaction, subject to ratification by the audit committee at the next meeting of the audit committee.

In addition, the policy provides that any related person transaction previously approved by the audit committee or otherwise already existing that is ongoing in nature will be reviewed by the audit committee annually to ensure that such related person transaction has been conducted in accordance with the previous approval granted by the audit committee, if any, and that all required disclosures regarding the related person transaction are made.

The policy provides that transactions involving compensation of executive officers will be reviewed and approved by our compensation committee in the manner to be specified in the charter of the compensation committee.

A related person transaction reviewed under this policy will be considered approved or ratified if it is authorized by the audit committee in accordance with the standards set forth in the policy after full disclosure of the related person's interests in the transaction. As appropriate for the circumstances, the policy provides that the audit committee will review and consider:

- the related person's interest in the related person transaction;



- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of business of our company;
- whether the transaction with the related person is proposed to be, or was, entered into on terms no less favorable to us than the terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

The policy provides that the audit committee will review all relevant information available to it about the related person transaction. The policy provides that the audit committee may approve or ratify the related person transaction only if the audit committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests. The policy provides that the audit committee may, in its sole discretion, impose such conditions as it deems appropriate on us or the related person in connection with approval of the related person transaction.

**REPORT OF THE AUDIT COMMITTEE**

The audit committee is appointed by the Board of Directors to assist the Board of Directors in fulfilling its oversight responsibilities with respect to (1) the integrity of our financial statements and financial reporting process and systems of internal controls regarding finance, accounting, and compliance with legal and regulatory requirements, (2) the qualifications, independence, and performance of our independent registered public accounting firm, (3) the performance of our internal audit function, if any, and (4) other matters as set forth in the charter of the audit committee approved by the Board of Directors.

Management is responsible for the preparation of the Catabasis financial statements and the financial reporting process, including its system of internal control over financial reporting and its disclosure controls and procedures. The independent registered public accounting firm is responsible for performing an audit of the Catabasis financial statements in accordance with the standards of the Public Company Accounting Oversight Board, or PCAOB, and issuing a report thereon. The audit committee's responsibility is to monitor and oversee these processes.

In connection with these responsibilities, the audit committee reviewed and discussed with management and the independent registered public accounting firm the audited consolidated financial statements of Catabasis for the fiscal year ended December 31, 2020. The audit committee also discussed with the independent registered public accounting firm the matters required to be discussed by the applicable requirements of the PCAOB and the Securities and Exchange Commission. In addition, the audit committee received written communications from the independent registered public accounting firm confirming its independence as required by the applicable requirements of the PCAOB and has discussed with the independent registered public accounting firm its independence.

Based on the reviews and discussions referred to above, the audit committee recommended to the Board of Directors that the audited consolidated financial statements of Catabasis be included in its Annual Report on Form 10-K for the fiscal year ended December 31, 2020, that was filed with the SEC.

THE AUDIT COMMITTEE OF THE BOARD  
OF DIRECTORS OF CATABASIS  
PHARMACEUTICALS, INC.

Gregg Lapointe, Chair  
Kenneth Bate  
Hugh Cole

## HOUSEHOLDING

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our documents, including the annual report to stockholders and proxy statement, may have been made available to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you upon written or oral request to Catabasis Pharmaceuticals, Inc., 100 High Street, 28<sup>th</sup> Floor, Boston, MA 02110, Attention: Corporate Secretary, or telephone: (617) 349-1971. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

## STOCKHOLDER PROPOSALS

A stockholder who would like to have a proposal, including director nominations, considered for inclusion in our 2022 proxy statement must submit the proposal in accordance with the procedures outlined in Rule 14a-8 of the Exchange Act so that it is received by us no later than December 21, 2021, which is 120 days prior to the first anniversary of the mailing date of this proxy statement. However, if the date of the 2022 annual meeting of stockholders is changed by more than 30 days from the date of this year’s meeting, then the deadline is a reasonable time before we begin to print and send our proxy statement for the 2022 annual meeting of stockholders. SEC rules set standards for eligibility and specify the types of stockholder proposals that may be excluded from a proxy statement.

If a stockholder wishes to propose a nomination of persons for election to our Board of Directors or present a proposal at an annual meeting but does not wish to have the proposal considered for inclusion in our proxy statement and proxy card, our amended and restated bylaws establish an advance notice procedure for such nominations and proposals. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the Board of Directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely notice in proper form to our corporate secretary of the stockholder’s intention to bring such business before the meeting.

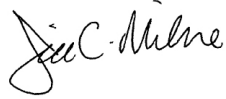
The required notice must be in writing and received by our corporate secretary at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year’s annual meeting. However, in the event that the date of the annual meeting is advanced by more than 30 days, or delayed by more than 60 days, from the first anniversary of the preceding year’s annual meeting, a stockholder’s notice must be so received no earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of (A) the 90th day prior to such annual meeting and (B) the tenth day following the day on which notice of the date of such annual meeting was mailed or public disclosure of the date of such annual meeting was made, whichever first occurs. For stockholder proposals to be brought before the 2022 annual meeting of stockholders, the required notice must be received by our corporate secretary at our principal executive offices no earlier than February 2, 2022 and no later than March 4, 2022.

Stockholder proposals should be addressed to Catabasis Pharmaceuticals, Inc., Attention: Corporate Secretary, 100 High Street, 28<sup>th</sup> Floor, Boston, MA 02110.

**OTHER MATTERS**

Our Board of Directors does not know of any other matters to be brought before the Annual Meeting. If any other matters not mentioned in this proxy statement are properly brought before the meeting, the individuals named in the proxy made available to stockholders intend to use their discretionary voting authority under the proxy to vote the proxy in accordance with their best judgment on those matters.

By Order of the Board of Directors

A handwritten signature in black ink that reads "Jill C. Milne". The signature is written in a cursive style with a large, stylized initial "J".

Jill C. Milne, Ph.D.  
*President and Chief Executive Officer*

**CERTIFICATE OF AMENDMENT**  
**TO**  
**RESTATED CERTIFICATE OF INCORPORATION**  
**OF**  
**CATABASIS PHARMACEUTICALS, INC.**

**Pursuant to Section 242 of the**  
**General Corporation Law of the State of Delaware**

**Catabasis Pharmaceuticals, Inc.** (hereinafter called the “Corporation”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

A resolution was duly adopted by the Board of Directors of the Corporation pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth an amendment to the Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved and adopted said proposed amendment at a special meeting of stockholders in accordance with Section 242 of the General Corporation Law of the State of Delaware. The resolution setting forth the amendment is as follows:

**RESOLVED:** That the first sentence of Article FOURTH of the Restated Certificate of Incorporation of the Corporation be and hereby is deleted in its entirety and the following three paragraphs are inserted in lieu thereof:

“FOURTH: That, effective on the filing of this Certificate of Amendment to Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the “Effective Time”), a one-for-[ ]<sup>(1)</sup> reverse stock split of the Corporation’s common stock, \$0.001 par value per share (the “Common Stock”), shall become effective, pursuant to which each [ ]<sup>(1)</sup> shares of Common Stock outstanding and held of record by each stockholder of the Corporation (including treasury shares) immediately prior to the Effective Time shall be reclassified and combined into one validly issued, fully paid and nonassessable share of Common Stock automatically and without any action by the holder thereof upon the Effective Time and shall represent one share of Common Stock from and after the Effective Time (such reclassification and combination of shares, the “Reverse Stock Split”). The par value of the Common Stock following the Reverse Stock Split shall remain at \$0.001 per share. No fractional shares of Common Stock shall be issued as a result of the Reverse Stock Split and, in lieu thereof, upon surrender after the Effective Time of a certificate or book entry position which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the Reverse Stock Split, following the Effective Time, shall be entitled to receive a cash payment equal to the fraction of a share of Common Stock to which such holder would otherwise be entitled multiplied by the closing price per share of the Common Stock on the Nasdaq Global Market at the close of business on the date of the Effective Time.

Each stock certificate or book entry position that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares formerly represented by such

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(1) Shall be a number equal to or greater than three and equal to or lesser than six and shall include not more than four decimal digits.

certificate or book entry position have been reclassified (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time); provided, however, that each person of record holding a certificate or book entry position that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate or book entry position, a new certificate or book entry position evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate or book entry position shall have been reclassified.

The total number of shares of all classes of stock which the Corporation shall have authority to issue is 155,000,000 shares, consisting of (i) 150,000,000 shares of Common Stock and (ii) 5,000,000 shares of Preferred Stock, \$0.001 par value per share (“Preferred Stock”).”

IN WITNESS WHEREOF, the Corporation has caused its corporate seal to be affixed hereto and this Certificate of Amendment to be signed by its President this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

**CATABASIS PHARMACEUTICALS, INC.**

By: \_\_\_\_\_

Jill C. Milne, Ph.D.  
*President and Chief Executive Officer*

CATABASIS PHARMACEUTICALS, INC.  
 AMENDED AND RESTATED  
 2015 STOCK INCENTIVE PLAN<sup>(1)</sup>

1. Purpose

The purpose of this 2015 Stock Incentive Plan (the “**Plan**”) of Catabasis Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), is to advance the interests of the Company’s stockholders by enhancing the Company’s ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align the interests of such persons with those of the Company’s stockholders. Except where the context otherwise requires, the term “**Company**” shall include any of the Company’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations thereunder (the “**Code**”) and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the “**Board**”).

2. Eligibility

All of the Company’s employees, officers and directors, as well as consultants and advisors to the Company (as such terms are defined and interpreted for purposes of Form S-8 under the Securities Act of 1933, as amended (the “**Securities Act**”), or any successor form) are eligible to be granted Awards under the Plan. Each person who is granted an Award under the Plan is deemed a “**Participant**.” “**Award**” means Options (as defined in Section 5), SARs (as defined in Section 6), Restricted Stock (as defined in Section 7), Restricted Stock Units (as defined in Section 7) and Other Stock-Based Awards (as defined in Section 8).

3. Administration and Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board’s sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award.

(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a “**Committee**”). All references in the Plan to the “**Board**” shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board’s powers or authority under the Plan have been delegated to such Committee or officers.

(c) Delegation to Officers. To the extent permitted by applicable law, the Board may delegate to one or more officers of the Company the power to grant Options and other Awards that constitute rights under Delaware law (subject to any limitations under the Plan) to employees or officers of the Company and to exercise such other powers under the Plan as the Board may determine, *provided* that the Board shall fix the terms of such Awards to be granted by such officers (including the exercise price of such Awards, which may include a formula by which the exercise price will be determined) and the maximum number of shares subject to such Awards that the officers may grant; *provided further*, however, that no officer shall be authorized to grant such Awards to any “executive officer” of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)) or to any “officer” of the Company (as

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(1) As amended by the Plan Increase.

defined by Rule 16a-1 under the Exchange Act). The Board may not delegate authority under this Section 3(c) to grant Restricted Stock, unless Delaware law then permits such delegation.

4. Stock Available for Awards

(a) Number of Shares; Share Counting.

(1) Authorized Number of Shares. Subject to adjustment under Section 9, Awards may be made under the Plan (any or all of which Awards may be in the form of Incentive Stock Options, as defined in Section 5(b)) for up to such number of shares of common stock, \$0.001 par value per share, of the Company (the "**Common Stock**") as is equal to the sum of:

(A) 9,372,248 shares of Common Stock; plus

(B) such additional number of shares of Common Stock (up to 150,465 shares) as is equal to the sum of (x) the 2,594 shares of Common Stock reserved for issuance under the Company's 2008 Equity Incentive Plan (the "**Existing Plan**") that remained available for grant under the Existing Plan immediately prior to the closing of the Company's initial public offering and (y) the number of shares of Common Stock subject to awards granted under the Existing Plan which awards expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options to any limitations of the Code). Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(2) Share Counting. For purposes of counting the number of shares available for the grant of Awards under the Plan:

(A) all shares of Common Stock covered by SARs shall be counted against the number of shares available for the grant of Awards under the Plan; *provided, however*, that (i) SARs that may be settled only in cash shall not be so counted and (ii) if the Company grants an SAR in tandem with an Option for the same number of shares of Common Stock and provides that only one such Award may be exercised (a "**Tandem SAR**"), only the shares covered by the Option, and not the shares covered by the Tandem SAR, shall be so counted, and the expiration of one in connection with the other's exercise will not restore shares to the Plan;

(B) if any Award (i) expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right) or (ii) results in any Common Stock not being issued, the unused Common Stock covered by such Award shall again be available for the grant of Awards; *provided, however*, that (1) in the case of Incentive Stock Options, the foregoing shall be subject to any limitations under the Code, (2) in the case of the exercise of an SAR, the number of shares counted against the shares available under the Plan shall be the full number of shares subject to the SAR multiplied by the percentage of the SAR actually exercised, regardless of the number of shares actually used to settle such SAR upon exercise and (3) the shares covered by a Tandem SAR shall not again become available for grant upon the expiration or termination of such Tandem SAR;

(C) shares of Common Stock delivered (by actual delivery, attestation, or net exercise) to the Company by a Participant to (i) purchase shares of Common Stock upon the exercise of an Award or (ii) satisfy tax withholding obligations (including shares retained from the Award creating the tax obligation) shall not be added back to the number of shares available for the future grant of Awards; and

(D) shares of Common Stock repurchased by the Company on the open market using the proceeds from the exercise of an Award shall not increase the number of shares available for future grant of Awards.

(b) Substitute Awards. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards in



substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof. Substitute Awards may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4(a)(1), except as may be required by reason of Section 422 and related provisions of the Code.

#### 5. Stock Options

(a) General. The Board may grant options to purchase Common Stock (each, an “**Option**”) and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable.

(b) Incentive Stock Options. An Option that the Board intends to be an “incentive stock option” as defined in Section 422 of the Code (an “**Incentive Stock Option**”) shall only be granted to employees of Catabasis Pharmaceuticals, Inc., any of Catabasis Pharmaceuticals, Inc.’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. An Option that is not intended to be an Incentive Stock Option shall be designated a “**Nonstatutory Stock Option**.” The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) that is intended to be an Incentive Stock Option is not an Incentive Stock Option or if the Company converts an Incentive Stock Option to a Nonstatutory Stock Option.

(c) Exercise Price. The Board shall establish the exercise price of each Option and specify the exercise price in the applicable Option agreement. The exercise price shall be not less than 100% of the fair market value per share of Common Stock as determined by (or in a manner approved by) the Board (“**Fair Market Value**”) on the date the Option is granted; *provided* that if the Board approves the grant of an Option with an exercise price to be determined on a future date, the exercise price shall be not less than 100% of the Fair Market Value on such future date.

(d) Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement; *provided, however*, that no Option will be granted with a term in excess of 10 years.

(e) Exercise of Options. Options may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with payment in full (in the manner specified in Section 5(f)) of the exercise price for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.

(f) Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

(1) in cash or by check, payable to the order of the Company;

(2) except as may otherwise be provided in the applicable Option agreement or approved by the Board, in its sole discretion, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(3) to the extent provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their Fair Market Value, provided (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant for such minimum period of time, if any, as may be established by the Board in

its discretion and (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;

(4) to the extent provided for in the applicable Nonstatutory Stock Option agreement or approved by the Board in its sole discretion, by delivery of a notice of “net exercise” to the Company, as a result of which the Participant would receive (i) the number of shares underlying the portion of the Option being exercised, less (ii) such number of shares as is equal to (A) the aggregate exercise price for the portion of the Option being exercised divided by (B) the Fair Market Value on the date of exercise;

(5) to the extent permitted by applicable law and provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by payment of such other lawful consideration as the Board may determine; or

(6) by any combination of the above permitted forms of payment.

(g) Limitation on Repricing. Unless such action is approved by the Company’s stockholders, the Company may not (except as provided for under Section 9): (1) amend any outstanding Option granted under the Plan to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option, (2) cancel any outstanding option (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan (other than Awards granted pursuant to Section 4(b)) covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option, (3) cancel in exchange for a cash payment any outstanding Option with an exercise price per share above the then-current Fair Market Value, or (4) take any other action under the Plan that constitutes a “repricing” within the meaning of the rules of the NASDAQ Stock Market (“*NASDAQ*”).

(h) No Dividend Equivalents. No Option shall provide for the payment or accrual of dividend equivalents.

#### 6. Stock Appreciation Rights

(a) General. The Board may grant Awards consisting of stock appreciation rights (“*SARs*”) entitling the holder, upon exercise, to receive an amount of Common Stock or cash or a combination thereof (such form to be determined by the Board) determined by reference to appreciation, from and after the date of grant, in the Fair Market Value of a share of Common Stock over the measurement price established pursuant to Section 6(b). The date as of which such appreciation is determined shall be the exercise date.

(b) Measurement Price. The Board shall establish the measurement price of each SAR and specify it in the applicable SAR agreement. The measurement price shall not be less than 100% of the Fair Market Value on the date the SAR is granted; *provided* that if the Board approves the grant of an SAR effective as of a future date, the measurement price shall be not less than 100% of the Fair Market Value on such future date.

(c) Duration of SARs. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable SAR agreement; *provided, however*, that no SAR will be granted with a term in excess of 10 years.

(d) Exercise of SARs. SARs may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with any other documents required by the Board.

(e) Limitation on Repricing. Unless such action is approved by the Company’s stockholders, the Company may not (except as provided for under Section 9): (1) amend any outstanding SAR granted under the Plan to provide a measurement price per share that is lower than the then-current measurement price per share of such outstanding SAR, (2) cancel any outstanding SAR (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan (other than Awards granted pursuant to Section 4(b)) covering the same or a different number of shares of Common Stock and having an exercise or measurement price per share lower than the then-current measurement price per share of the cancelled SAR, (3) cancel in exchange for a cash payment any outstanding SAR with a measurement price per share

above the then-current Fair Market Value, or (4) take any other action under the Plan that constitutes a “repricing” within the meaning of the rules of NASDAQ.

(f) No Dividend Equivalents. No SAR shall provide for the payment or accrual of dividend equivalents.

#### 7. Restricted Stock; Restricted Stock Units

(a) General. The Board may grant Awards entitling recipients to acquire shares of Common Stock (“**Restricted Stock**”), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. The Board may also grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered at the time such Award vests (“**Restricted Stock Units**”) (Restricted Stock and Restricted Stock Units are each referred to herein as a “**Restricted Stock Award**”).

(b) Terms and Conditions for All Restricted Stock Awards. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.

##### (c) Additional Provisions Relating to Restricted Stock.

(1) Dividends. Any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock (“**Accrued Dividends**”) shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Accrued Dividends will be made no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the underlying shares of Restricted Stock.

(2) Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock, as well as dividends or distributions paid on such Restricted Stock, shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to his or her Designated Beneficiary. “**Designated Beneficiary**” means (i) the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant’s death or (ii) in the absence of an effective designation by a Participant, the Participant’s estate.

##### (d) Additional Provisions Relating to Restricted Stock Units.

(1) Settlement. Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company such number of shares of Common Stock or (if so provided in the applicable Award agreement) an amount of cash equal to the Fair Market Value of such number of shares of Common Stock as are set forth in the applicable Restricted Stock Unit agreement. The Board may, in its discretion, provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant in a manner that complies with Section 409A of the Code.

(2) Voting Rights. A Participant shall have no voting rights with respect to any Restricted Stock Units.

(3) Dividend Equivalents. The Award agreement for Restricted Stock Units may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock (“**Dividend Equivalents**”). Dividend Equivalents may be settled in cash and/or shares of Common Stock and shall be subject to the same restrictions on transfer and forfeitability as, and the payment of such Dividend Equivalents shall be subject to the vesting of, the Restricted Stock Units with respect to which paid.

## 8. Other Stock-Based Awards

(a) General. Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants (“**Other Stock-Based-Awards**”). Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock-Based Awards may be paid in shares of Common Stock or cash, as the Board shall determine. Any Dividend Equivalents awarded with respect to Other Stock-Based Awards shall be subject to the same restrictions on transfer and forfeitability as, and the payment of such Dividend Equivalents shall be subject to the vesting of, the Award with respect to which granted.

(b) Terms and Conditions. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock-Based Award, including any purchase price applicable thereto.

## 9. Adjustments for Changes in Common Stock and Certain Other Events

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the share counting rules set forth in Section 4(a), (iii) the number and class of securities and exercise price per share of each outstanding Option, (iv) the share and per-share provisions and the measurement price of each outstanding SAR, (v) the number of shares subject to and the repurchase price per share subject to each outstanding Restricted Stock Award and (vi) the share and per-share-related provisions and the purchase price, if any, of each outstanding Other Stock-Based Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

### (b) Reorganization Events.

(1) Definition. A “**Reorganization Event**” shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.

### (2) Consequences of a Reorganization Event on Awards Other than Restricted Stock.

(A) In connection with a Reorganization Event, the Board may take any one or more of the following actions as to all or any (or any portion of) outstanding Awards other than Restricted Stock on such terms as the Board determines (except to the extent specifically provided otherwise in an applicable Award agreement or another agreement between the Company and the Participant): (i) provide that such Awards shall be assumed, or substantially equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to a Participant, provide that all of the Participant’s unexercised Awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the Participant (to the extent then exercisable) within a specified period following the date of such notice, (iii) provide that outstanding Awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an Award shall lapse, in whole or in part prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which

holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the “**Acquisition Price**”), make or provide for a cash payment to Participants with respect to each Award held by a Participant equal to (A) the number of shares of Common Stock subject to the vested portion of the Award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such Reorganization Event) multiplied by (B) the excess, if any, of (I) the Acquisition Price over (II) the exercise, measurement or purchase price of such Award and any applicable tax withholdings, in exchange for the termination of such Award, (v) provide that, in connection with a liquidation or dissolution of the Company, Awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings) and (vi) any combination of the foregoing. In taking any of the actions permitted under this Section 9(b)(2), the Board shall not be obligated by the Plan to treat all Awards, all Awards held by a Participant, or all Awards of the same type, identically.

(B) Notwithstanding the terms of Section 9(b)(2)(A), in the case of outstanding Restricted Stock Units that are subject to Section 409A of the Code: (i) if the applicable Restricted Stock Unit agreement provides that the Restricted Stock Units shall be settled upon a “change in control event” within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(i), and the Reorganization Event constitutes such a “change in control event”, then no assumption or substitution shall be permitted pursuant to Section 9(b)(2)(A)(i) and the Restricted Stock Units shall instead be settled in accordance with the terms of the applicable Restricted Stock Unit agreement; and (ii) the Board may only undertake the actions set forth in clauses (iii), (iv) or (v) of Section 9(b)(2)(A) if the Reorganization Event constitutes a “change in control event” as defined under Treasury Regulation Section 1.409A-3(i)(5)(i) and such action is permitted or required by Section 409A of the Code; if the Reorganization Event is not a “change in control event” as so defined or such action is not permitted or required by Section 409A of the Code, and the acquiring or succeeding corporation does not assume or substitute the Restricted Stock Units pursuant to clause (i) of Section 9(b)(2)(A), then the unvested Restricted Stock Units shall terminate immediately prior to the consummation of the Reorganization Event without any payment in exchange therefor.

(C) For purposes of Section 9(b)(2)(A)(i), an Award (other than Restricted Stock) shall be considered assumed if, following consummation of the Reorganization Event, such Award confers the right to purchase or receive pursuant to the terms of such Award, for each share of Common Stock subject to the Award immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); *provided, however*, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise or settlement of the Award to consist solely of such number of shares of common stock of the acquiring or succeeding corporation (or an affiliate thereof) that the Board determined to be equivalent in value (as of the date of such determination or another date specified by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

(3) Consequences of a Reorganization Event on Restricted Stock. Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company with respect to outstanding Restricted Stock shall inure to the benefit of the Company’s successor and shall, unless the Board determines otherwise, apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to such Restricted Stock; *provided, however*, that the Board may provide for termination or deemed satisfaction of such repurchase or other rights under the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, either initially or by amendment. Upon the occurrence of a

Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock then outstanding shall automatically be deemed terminated or satisfied.

#### 10. General Provisions Applicable to Awards

(a) Transferability of Awards. Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution or, other than in the case of an Incentive Stock Option, pursuant to a qualified domestic relations order, and, during the life of the Participant, shall be exercisable only by the Participant; *provided, however*, that the Board may permit or provide in an Award for the gratuitous transfer of the Award by the Participant to or for the benefit of any immediate family member, family trust or other entity established for the benefit of the Participant and/or an immediate family member thereof if the Company would be eligible to use a Form S-8 under the Securities Act for the registration of the sale of the Common Stock subject to such Award to such proposed transferee; *provided further*, that the Company shall not be required to recognize any such permitted transfer until such time as such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees. For the avoidance of doubt, nothing contained in this Section 10(a) shall be deemed to restrict a transfer to the Company.

(b) Documentation. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

(c) Board Discretion. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.

(d) Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.

(e) Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may decide to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise, vesting or release from forfeiture of an Award or at the same time as payment of the exercise or purchase price, unless the Company determines otherwise. If provided for in an Award or approved by the Board in its sole discretion, a Participant may satisfy such tax obligations in whole or in part by delivery (either by actual delivery or attestation) of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value; *provided, however*, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). Shares used to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

(f) Amendment of Award. Except as otherwise provided in Sections 5(g) and 6(e) with respect to repricings and Section 11(d) with respect to actions requiring stockholder approval, the Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award

of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option. The Participant's consent to such action shall be required unless (i) the Board determines that the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Plan or (ii) the change is permitted under Section 9.

(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously issued or delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and regulations and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(h) Acceleration. The Board may at any time provide that any Award shall become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

#### 11. Miscellaneous

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award by virtue of the adoption of the Plan, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares.

(c) Effective Date and Term of Plan. The Plan shall become effective immediately prior to the effectiveness of the Company's initial public offering (the "*Effective Date*"). No Awards shall be granted under the Plan after the expiration of 10 years from the Effective Date, but Awards previously granted may extend beyond that date.

(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time provided that (i) to the extent required by Section 162(m) of the Code, no Award granted to a Participant that is intended to comply with Section 162(m) of the Code after the date of such amendment shall become exercisable, realizable or vested, as applicable to such Award, unless and until the Company's stockholders approve such amendment in the manner required by Section 162(m) of the Code; and (ii) no amendment that would require stockholder approval under the rules of NASDAQ may be made effective unless and until the Company's stockholders approve such amendment;. In addition, if at any time the approval of the Company's stockholders is required as to any other modification or amendment under Section 422 of the Code or any successor provision with respect to Incentive Stock Options, the Board may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 11(d) shall apply to, and be binding on the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment, taking into account any related action, does not materially and adversely affect the rights of Participants under the Plan. No Award shall be made that is conditioned upon stockholder approval of any amendment to the Plan unless the Award provides that (i) it will terminate or be forfeited if stockholder approval of such amendment is not obtained within no more than 12 months from the date of grant and (2) it may not be exercised or settled (or otherwise result in the issuance of Common Stock) prior to such stockholder approval.

(e) Authorization of Sub-Plans (including for Grants to non-U.S. Employees). The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities, tax or other laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board's discretion under the Plan as the

Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.

(f) Compliance with Section 409A of the Code. Except as provided in individual Award agreements initially or by amendment, if and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes “nonqualified deferred compensation” within the meaning of Section 409A of the Code and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of “separation from service” (as determined under Section 409A of the Code) (the “**New Payment Date**”), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A of the Code but do not to satisfy the conditions of that section.

(g) Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, employee or agent of the Company will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as a director, officer, employee or agent of the Company. The Company will indemnify and hold harmless each director, officer, employee or agent of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been or will be delegated, against any cost or expense (including attorneys’ fees) or liability (including any sum paid in settlement of a claim with the Board’s approval) arising out of any act or omission to act concerning the Plan unless arising out of such person’s own fraud or bad faith.

(h) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than the State of Delaware.



CATABASIS PHARMACEUTICALS, INC.  
100 HIGH STREET, 28TH FLOOR  
BOSTON, MA 02110

**VOTE BY INTERNET**  
Before The Meeting - Go to [www.proxyvote.com](http://www.proxyvote.com)

Use the internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 p.m. Eastern Time on June 1, 2021. 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/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021)

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

**VOTE BY PHONE - 1-800-690-6903**

Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 p.m. Eastern Time on June 1, 2021. 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:

D47399-P51431

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

**THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.**

<b>CATABASIS PHARMACEUTICALS, INC.</b>		<b>For All</b>	<b>Withhold All</b>	<b>For All Except</b>	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.	
<b>The Board of Directors recommends you vote FOR the following:</b>						
1.	Election of Class III Directors to serve until the 2024 Annual Meeting of Stockholders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	
<b>Nominees:</b>						
	01) Gregg Lapointe					
	02) Jonathan Violin					
<b>The Board of Directors recommends you vote FOR proposals 2 through 6:</b>		<b>For</b>	<b>Against</b>	<b>Abstain</b>		
2.	To approve the issuance, in accordance with Nasdaq Listing Rule 5635(a), of our common stock, upon conversion of our Series X Preferred Stock issued in January and February 2021.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2021.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3.	To approve the amendments to our certificate of incorporation, as amended, to effect a reverse stock split at a ratio in the range of 1-for-3 to 1-for-6, with the exact ratio to be set within that range at the discretion of our Board of Directors before December 2, 2021 without further approval or authorization of our stockholders and with our Board of Directors able to elect to abandon such proposed amendment and not effect the reverse stock split authorized by stockholders, in its sole discretion.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>The Board of Directors recommends you vote 1 year on the following proposal:</b>	<b>One Year</b> <b>Two Years</b> <b>Three Years</b> <b>Abstain</b>
4.	To approve an amendment of our Amended and Restated 2015 Stock Incentive Plan to increase the number of shares available for issuance thereunder by 6,000,000 shares.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. To approve, by non-binding advisory vote, the frequency of future executive compensation advisory votes.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
					<b>NOTE:</b> The shares represented by this proxy when properly executed will be voted in the manner directed herein by the undersigned stockholder(s). If no direction is made, this proxy will be voted FOR the election of the nominees listed in item 1, FOR items 2 through 6 and 1 Year on Item 7. If any other matters properly come before the meeting, the persons named in this proxy will vote in their discretion.	
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.						
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>
Signature [PLEASE SIGN WITHIN BOX]		Date		Signature (Joint Owners)		Date

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:**  
The Notice and Proxy Statement and Annual Report are available at [www.proxyvote.com](http://www.proxyvote.com).

D47400-P51431

**THIS PROXY IS SOLICITED ON BEHALF OF  
THE BOARD OF DIRECTORS OF  
CATABASIS PHARMACEUTICALS, INC.  
June 2, 2021 at 9:00 a.m. Eastern Time**

The stockholder(s) hereby appoint(s) Jill C. Milne, Noah Clauser and Ben Harshbarger, or any of them as proxies, each with the power to appoint her or his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of Catabasis Pharmaceuticals, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held online at 9:00 a.m., Eastern Time, on June 2, 2021 at [www.virtualshareholdermeeting.com/CATB2021](http://www.virtualshareholdermeeting.com/CATB2021).

**THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE STOCKHOLDER(S). IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED FOR THE ELECTION OF THE NOMINEES LISTED ON THE REVERSE SIDE FOR THE BOARD OF DIRECTORS, FOR PROPOSALS 2 THROUGH 6 AND 1 YEAR ON PROPOSAL 7. IN THEIR DISCRETION, THE PROXIES ARE AUTHORIZED TO VOTE UPON SUCH OTHER BUSINESS AS MAY PROPERLY COME BEFORE THE MEETING OR ANY POSTPONEMENT OR ADJOURNMENT THEREOF.**

**PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.**

**Continued and to be signed on reverse side**