

**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

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

(Name of Registrant as Specified in Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 - Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies: _____
 - (2) Aggregate number of securities to which transaction applies: _____
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): _____
 - (4) Proposed maximum aggregate value of transaction: _____
 - (5) Total fee paid: _____
 - Fee paid previously with preliminary materials.
 - Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid: _____
 - (2) Form, Schedule or Registration Statement No.: _____
 - (3) Filing Party: _____
 - (4) Date Filed: _____
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Lixte Biotechnology Holdings, Inc.
680 East Colorado Boulevard, Suite 180
Pasadena, California 91101

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 26, 2023

April 14, 2023

To the stockholders of Lixte Biotechnology Holdings, Inc.:

Notice is hereby given that a Special Meeting of Stockholders (the "Special Meeting") of Lixte Biotechnology Holdings, Inc., a Delaware corporation ("we", "us", "our", "Lixte", or the "Company") will be held on May 26, 2023, at 10:00 a.m. Pacific Time. You are being asked to vote on the following matters:

- (1) To approve an amendment to the Company's Certificate of Incorporation to effect a reverse stock split of the outstanding shares of the Company's common stock at a split ratio of up to a maximum of a 1-for-10 split, as determined by the Board of Directors in its sole discretion (the "Reverse Split Proposal"); and
- (2) To authorize the adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Reverse Split Proposal.

The accompanying proxy statement contains additional information and should be carefully reviewed by stockholders.

The Special Meeting will be a completely virtual meeting of stockholders, conducted solely online via live webcast. You will be able to attend and participate in the Special Meeting online and vote your shares electronically by visiting: www.meetnow.global/MVJD4AV at the meeting date and time described in the accompanying proxy statement. There is no physical location for the Special Meeting. We are utilizing the latest technology to provide safe access for our stockholders. Hosting a virtual meeting will enable greater stockholder attendance and participation from any location. Questions related to the Special Meeting or voting matters can be submitted by email to Info@Lixte.com. We encourage you to attend online and participate. We recommend that you log in a few minutes before the Special Meeting start time of 10:00 a.m. Pacific Time on May 26, 2023, to ensure you are logged in when the Special Meeting begins.

Pursuant to the bylaws of the Company, the Board of Directors has fixed the close of business on April 12, 2023 as the record date (the "Record Date") for determination of stockholders entitled to notice and to vote at the Special Meeting and any adjournment thereof. Holders of the Company's common stock are entitled to vote at the Special Meeting.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ John S. Kovach

Chief Executive Officer

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

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Lixte Biotechnology Holdings, Inc.
680 East Colorado Boulevard, Suite 180
Pasadena, California 91101

PROXY STATEMENT
FOR
SPECIAL MEETING OF STOCKHOLDERS
May 26, 2023

INTRODUCTION

The enclosed proxy is solicited by the Board of Directors (“Board of Directors” or “Board”) of Lixte Biotechnology Holdings, Inc. (the “Company”), in connection with the Special Meeting of Stockholders (the “Special Meeting”) of the Company, to be held on May 26, 2023, at 10:00 a.m. Pacific Time via live webcast at meetnow.global/MVJD4AV.

At the Special Meeting, you will be asked to consider and vote upon the following matters:

- (1) To approve an amendment to the Company’s Certificate of Incorporation to effect a reverse stock split of the outstanding shares of the Company’s common stock at a split ratio of up to a maximum of a 1-for-10 split, as determined by the Board of Directors in its sole discretion (the “Reverse Split Proposal”); and
- (2) To authorize the adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Reverse Split Proposal.

**Important Notice Regarding the Availability of Proxy Materials for the
Special Meeting of Stockholders to Be Held on May 26, 2023.**

The proxy statement is available at www.edocumentview.com/LIXT.

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

How do I access the proxy materials over the internet?

Notice of the Special Meeting, the proxy statement and form of proxy are available online at <https://www.edocumentview.com/LIXT>.

How can I attend the Special Meeting?

The Special Meeting will be a completely virtual meeting of stockholders, which will be conducted exclusively by webcast. You are entitled to participate in the Special Meeting only if you were a stockholder of the Company as of the close of business on the Record Date, or if you hold a valid proxy for the Special Meeting. No physical meeting will be held. You will be able to attend the Special Meeting online by visiting meetnow.global/MVJD4AV. You also will be able to vote your shares online by attending the Special Meeting by webcast. Questions related to the Special Meeting or voting matters can be submitted by email to Info@Lixte.com.

To participate in the Special Meeting, you will need to review the information included in these proxy materials including this Proxy Statement and on your proxy card. If you hold your shares through an intermediary, such as a bank or broker, you must register in advance using the instructions below.

The online meeting will begin promptly at 10:00 a.m. Pacific Time. We encourage you to access the meeting prior to the start time leaving ample time for the check in. Please follow the registration instructions as outlined in this proxy statement.

How do I register to attend the Special Meeting virtually on the Internet?

If you are a registered stockholder (i.e., you hold your shares through our transfer agent, Computershare Trust Company, N.A.), you do not need to register to attend the Special Meeting virtually on the Internet. Please follow the instructions on the proxy card that you received. Registered stockholders can attend the meeting by accessing the meeting site at meetnow.global/MVJD4AV and entering the 15-digit control number that can be found on your proxy card mailed with the proxy materials.

If you hold your shares through an intermediary, such as a bank or broker, you must register in advance to attend the Special Meeting virtually on the Internet. To register to attend the Special Meeting online by webcast you must submit proof of your proxy power (legal proxy) reflecting your holdings in Lixte Biotechnology Holdings, Inc. along with your name and email address to Computershare. Requests for registration must be labeled as "Legal Proxy" and be received no later than 5:00 p.m. Eastern Time on May 22, 2023. You will receive a confirmation of your registration by email after we receive your registration materials.

Requests for registration should be directed to us at the following:

By email

Forward the email from your broker, or attach an image of your legal proxy, to legalproxy@computershare.com.

By mail

Computershare
COMPANY Legal Proxy
P.O. Box 43001
Providence, RI 02940-3001

Who can vote at the Special Meeting?

Only stockholders of record at the close of business on April 12, 2023 will be entitled to vote at the Special Meeting. On this record date, there were 16,659,093 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on April 12, 2023 your shares were registered directly in your name with the Company's transfer agent, Computershare Trust Company, N.A., then you are a stockholder of record. As a stockholder of record, you may vote at the Meeting or vote by proxy. Whether or not you plan to attend the Meeting, we urge you to fill out and return the enclosed proxy card to ensure your vote is counted. Registered stockholders can attend the meeting by accessing the meeting site at meetnow.global/MVJD4AV and entering the 15-digit control number that can be found on your proxy card mailed with the proxy materials.

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

If on April 12, 2023 your shares were not held in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and the Proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Special Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the Special Meeting. However, since you are not the stockholder of record, you may not vote your shares at the Meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are two matters scheduled for a vote:

- To approve an amendment to the Company's Certificate of Incorporation to effect a reverse stock split of the outstanding shares of the Company's common stock at a split ratio of up to a maximum of a 1-for-10 split, as determined by the Board of Directors in its sole discretion.
- To authorize the adjournment of the Special Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of the Reverse Split Proposal.

What if another matter is properly brought before the meeting?

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

How Do I Vote?

For each of the Proposals to be voted on, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote at the Special Meeting or vote by proxy using the enclosed proxy card. Alternatively, you may vote by proxy either by telephone or on the Internet. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote even if you have already voted by proxy.

- To vote using the proxy card, simply complete, sign and date the proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the Special Meeting, we will vote your shares as you direct.

- To vote over the telephone, dial toll-free 1-800-652-VOTE (8683) using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice. Your telephone vote must be received by 11:59 p.m. Pacific Time on May 25, 2023 to be counted.
- To vote through the internet, go to <https://www.envisionreports.com/LIXT> to complete an electronic proxy card. You will be asked to provide the company number and control number from the Notice. Your internet vote must be received by 11:59 p.m. Pacific Time on May 25, 2023 to be counted.
- To vote during the Special Meeting, follow the instructions posted at meetnow.global/MVJD4AV.

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

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received the proxy materials containing voting instructions from that organization rather than from the Company. Simply follow the voting instructions to ensure that your vote is counted. To vote at the Special Meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

What if I have technical difficulties or trouble accessing the virtual Special Meeting?

The virtual meeting platform is fully supported across browsers (MS Edge, Firefox, Chrome and Safari) and devices (desktops, laptops, tablets and cell phones) running the most up-to-date version of applicable software and plug-ins. Participants should ensure that they have a strong WiFi connection wherever they intend to participate in the meeting. We encourage you to access the meeting prior to the start time. A link on the meeting page will provide further assistance should you need it, or you may call 1-888-724-2416.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of April 12, 2023.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

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

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

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the particular proposal is deemed to be a “routine” matter pursuant to the definition used by the New York Stock Exchange (“NYSE”). Brokers and nominees can use their discretion to vote “uninstructed” shares with respect to matters that are considered to be “routine”, but not with respect to “non-routine” matters. Each of Proposals 1 and 2 is considered a “routine matter”. Therefore, if you do not provide voting instructions to your broker regarding the Proposals, your broker will be permitted to exercise discretionary voting authority to vote your shares on Proposals 1 and 2.

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

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, “For” the approval of the amendment to the Company’s Certificate of Incorporation to effect a reverse split. If any other matter is properly presented at the meeting, your proxy holder (one of the individuals named on your proxy card) will vote your shares using their best judgment.

Who is paying for this proxy solicitation?

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

What does it mean if I receive more than one Proxy Statement?

If you receive more than one Proxy Statement, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions in this Proxy Statement to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

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

- You may submit another properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the internet.
- You may send a timely written notice that you are revoking your proxy to the Company’s Secretary at 680 East Colorado Boulevard, Suite 180, Pasadena, California 91101.
- You may vote during the Special Meeting which will be hosted via the Internet.

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

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

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

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting.

What are “broker non-votes”?

As discussed above, when a beneficial owner of shares held in “street name” does not give instructions to the broker or nominee holding the shares as to how to vote on matters deemed by the NYSE to be “non-routine”, the broker or nominee cannot vote the shares. These unvoted shares are counted as “broker non-votes”. However, each of the Proposals is considered a “routine matter”.

How Many Votes Are Needed for the Proposal to Pass?

Proposal	Vote Required for Approval	Effect of Abstention	Effect of Broker Non-Vote
To approve an amendment to the Company’s Certificate of Incorporation to effect a reverse stock split of the outstanding shares of the Company’s common stock at a split ratio of up to a maximum of a 1-for-10 split, as determined by the Board of Directors in its sole discretion	“For” votes from the holders of a majority of shares outstanding and entitled to vote on the matter	Against.	Against.
To adjourn the Special Meeting, if necessary, in order to select more proxies	“For” votes from the holders of a majority of shares present in person or represented by proxy and entitled to vote	Against.	No Effect.

Vote cast online during the virtual Special Meeting will constitute votes cast in person at the Special Meeting for purposes of the votes.

What Constitutes a Quorum?

To carry on business at the Special Meeting, we must have a quorum. A quorum is present when 33-1/3% of the shares entitled to vote, as of the Record Date, are represented in person or by proxy. Virtual attendance at the Special Meeting constitutes presence in person for purposes of a quorum at the meeting. Thus, holders representing at least 5,553,031 shares must be represented in person or by proxy to have a quorum. Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote at the Special Meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. Any shares owned by the Company are not considered outstanding or considered to be present at the Special Meeting. If there is not a quorum at the Special Meeting, our stockholders may adjourn the meeting.

How can I find out the Results of the Voting at the Special Meeting?

Preliminary voting results will be announced at the Special Meeting. Final voting results will be published in a Current Report on Form 8-K, which we will file with the Securities and Exchange Commission ("SEC") within four business days of the Special Meeting.

PROPOSAL 1: APPROVAL OF AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF THE COMPANY'S COMMON STOCK

General

Our Board is recommending that our stockholders approve a proposed amendment to our Certificate of Incorporation in substantially the form attached hereto as Appendix A, to effect a reverse stock split of our outstanding shares of common stock at a split ratio of up to a maximum of a 1-for-10 split, as determined by our Board of Directors in its sole discretion (the "Reverse Split Proposal").

If the stockholders approve and adopt the proposed amendment to effect the reverse stock split, and our Board decides to implement it, the reverse stock split will become effective on the date of the filing of the amendment with the Secretary of State of the State of Delaware.

If implemented, the reverse stock split will be realized simultaneously for all outstanding common stock and the ratio determined by our Board will be the same for all outstanding shares of common stock. The reverse stock split will affect all holders of shares of our common stock uniformly and each stockholder will hold the same percentage of our common stock outstanding immediately following the reverse stock split as that stockholder held immediately prior to the reverse stock split, except for adjustments that may result from the treatment of fractional shares as described below. The proposed amendment will not reduce the number of authorized shares of common stock (which will remain at 100,000,000) or preferred stock (which will remain at 10,000,000) or change the par values of our common stock (which will remain at \$0.0001 per share) or preferred stock (which will remain at \$0.0001 per share).

Background

Our common stock and warrants are currently quoted on The Nasdaq Capital Market, and we are therefore subject to its continued listing requirements, including requirements with respect to the market value of publicly-held shares, market value of listed shares, minimum bid price per share, and minimum stockholder's equity, among others, and requirements relating to board and committee independence. If we fail to satisfy one or more of the requirements, we may be delisted from The Nasdaq Capital Market.

On June 24, 2022, the Company received a written notice (the "Notice") from The Nasdaq Stock Market LLC ("Nasdaq") that the Company had not been in compliance with the minimum bid price requirement set forth in Nasdaq Listing Rule 5550(a)(2) for a period of 30 consecutive business days. Nasdaq Listing Rule 5550(a)(2) requires listed securities to maintain a minimum closing bid price of \$1.00 per share, and Nasdaq Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum closing bid price requirement exists if the deficiency continues for a period of 30 consecutive business days.

In accordance with Nasdaq Listing Rule 5810(c)(3)(A) (the “Compliance Period Rule”), we were provided an initial period of 180 calendar days, or until December 21, 2022, to regain compliance with the bid price rule. As we did not regain compliance with the minimum price requirement, we were afforded a second 180 calendar day compliance period to regain compliance or until June 19, 2023. If, at any time before June 19, 2023, the bid price for our common stock closes at \$1.00 or more for a minimum of 10 consecutive business days as required under the Compliance Period Rule, the Nasdaq staff will provide written notification to us that we are in compliance with the bid price rule, unless the staff exercises its discretion to extend this 10-day period pursuant to Nasdaq Listing Rule 5810(c)(3)(H), which the staff has previously exercised.

If we do not regain compliance with the bid price rule by June 19, 2023 and we are not eligible for an additional compliance period at that time, the Nasdaq staff will provide written notification to us that our stock may be delisted. We would then be entitled to appeal the staff’s determination to a Nasdaq Listing Qualifications Panel and request a hearing. If we do appeal the delisting determination by the staff to the Nasdaq Listing Qualifications Panel, there can be no assurance that such appeal would be successful.

We intend to monitor the closing bid price of our common stock. If, based on the bid price of our common stock closing at or above \$1.00 per share for a minimum of ten consecutive trading days, we achieve compliance with the minimum bid price requirement prior to effecting the reverse stock split, we do not intend to effect the reverse stock split and, instead, we plan to cancel the Special Meeting.

The closing price of our common stock on April 12, 2023 was [\$0.____] per share.

Purpose of the Proposed Reverse Stock Split

Our Board’s primary objective in proposing the reverse stock split is to raise the per share trading price of our common stock. In particular, this will help us to maintain the listing of our common stock on The Nasdaq Capital Market.

Delisting from The Nasdaq Capital Market may adversely affect our ability to raise additional financing through the public or private sale of equity securities, may significantly affect the ability of investors to trade our securities, and may negatively affect the value and liquidity of our common stock. Delisting also could have other negative results, including the potential loss of employee confidence, the loss of institutional investors or interest in business development opportunities.

If we are delisted from The Nasdaq Capital Market and we are not able to list our common stock on another exchange, our common stock could be quoted on the OTC Market, including the “pink sheets”. As a result, we could face significant adverse consequences including, among others:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a “penny stock”, which would require brokers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and little or no analyst coverage for us;
- we would no longer qualify for exemptions from state securities registration requirements, which may require us to comply with applicable state securities laws; and
- a decreased ability to issue additional securities (including pursuant to short-form registration statements on Form S-3) or obtain additional financing in the future.

As of the Record Date, we were not in compliance with the Nasdaq \$1.00 minimum closing bid price requirement. Our Board believes that the proposed reverse stock split is a potentially effective means for us to regain or maintain compliance with the listing rules of Nasdaq and to avoid, or at least mitigate, the likely adverse consequences of our common stock being delisted from The Nasdaq Capital Market by producing the immediate effect of increasing the bid price of our common stock.

Increase the Market Price of our Common Stock to a Level More Appealing for Investors

We also believe that the reverse stock split could enhance the appeal of our common stock to the financial community, including institutional investors, and the general investing public. We believe that a number of institutional investors and investment funds are reluctant to invest in lower-priced securities and that brokerage firms may be reluctant to recommend lower-priced securities to their clients, which may be due in part to a perception that lower-priced securities are less promising as investments, are less liquid in the event that an investor wishes to sell its shares, or are less likely to be followed by institutional securities research firms and therefore more likely to have less third-party analysis of the Company available to investors. We believe that the reduction in the number of issued and outstanding shares of our common stock which would be caused by a reverse stock split, together with the anticipated increased stock price immediately following and resulting from a reverse stock split, may encourage interest and trading in our common stock, and thus possibly promote greater liquidity for our stockholders, thereby resulting in a broader market for the common stock than that which currently exists.

We cannot assure you that all or any of the anticipated beneficial effects on the trading market for our common stock will occur. Our Board cannot predict with certainty what effect the reverse stock split would have on the market price of our common stock, particularly over the longer term. Some investors may view a reverse stock split negatively, which could result in a decrease in our market capitalization. Additionally, any improvement in liquidity due to increased institutional or brokerage interest or lower trading commissions may be offset by the lower number of outstanding shares. We cannot provide you with any assurance that our shares will continue to qualify for listing on The Nasdaq Capital Market. As a result, the trading liquidity of our common stock may not improve. In addition, investors might consider the increased proportion of unissued authorized shares to issued shares to have an anti-takeover effect under certain circumstances, since the proportion allows for dilutive issuances.

Determination of Ratio

The ratio of the reverse stock split, if approved and implemented, will be at a ratio of up to a maximum of a 1-for-10 split, with the exact ratio to be determined by our Board of Directors in its sole discretion. Even if approved, the Board of Directors will have discretion to delay or to not implement the reverse stock split.

In determining the reverse stock split ratio, our Board will consider numerous factors, including:

- the historical and projected performance of our common stock;
- general economic and other related conditions prevailing in our industry and in the marketplace;
- the projected impact of the selected reverse stock split ratio on trading liquidity in our common stock;
- our capitalization (including the number of shares of our common stock issued and outstanding);
- the prevailing trading price for our common stock and the volume level thereof; and;
- potential devaluation of our market capitalization as a result of a reverse stock split.

The purpose of asking for authorization to amend our Certificate of Incorporation to implement the reverse stock split at a ratio to be determined by the Board, as opposed to a ratio fixed in advance, is to give our Board the flexibility to take into account then-current market conditions and changes in the price of our common stock, as well as to respond to other developments that may be deemed relevant when considering the appropriate reverse split ratio.

Principal Effects of the Reverse Stock Split

A reverse stock split refers to a reduction in the number of outstanding shares of a class of a corporation's capital stock, which may be accomplished, as in this case, by reclassifying and combining all of our outstanding shares of common stock into a proportionately smaller number of shares. For example, if our Board decides to implement a 1-for-10 reverse stock split of our common stock, then a stockholder holding 10,000 shares of our common stock before the reverse stock split would instead hold 1,000 shares of our common stock immediately after the reverse stock split is implemented. The reverse stock split will affect all of our stockholders uniformly and will not affect any stockholder's percentage ownership interests in our company or proportionate voting power, except for minor adjustments due to the additional net share fraction that will need to be issued as a result of the treatment of fractional shares. No fractional shares will be issued in connection with the reverse stock split. Instead, we will issue one full share of the post-reverse stock split common stock to any stockholder who would have been entitled to receive a fractional share as a result of the process.

The principal effect of implementing the reverse stock split will be that (i) the number of shares of common stock issued and outstanding will be reduced from the shares then currently issued and outstanding to a number of shares representing a maximum of one-tenth of that amount, but possibly less, as the case may be, based on the ratio of the reverse stock split as determined by our Board of Directors, and (ii) all outstanding options and warrants entitling the holders thereof to purchase shares of common stock will enable such holders to purchase, upon exercise of their options or warrants, as applicable, representing a maximum of one-tenth of the number of shares of common stock which such holders would have been able to purchase upon exercise of their options or warrants, as applicable, immediately preceding the implementation of the reverse stock split, at an exercise price equal to a maximum of ten times the exercise price specified before the implementation of the reverse stock split, resulting in essentially the same aggregate price being required to be paid therefor upon exercise thereof immediately preceding the implementation of the reverse stock split, as the case may be, based on the ratio for the reverse stock split as determined by our Board of Directors.

The following table, which is for illustrative purposes only, illustrates the effects of the reverse stock split at certain exchange ratios within the foregoing range, without giving effect to any adjustments for fractional shares of common stock, on our outstanding shares of common stock and authorized shares of capital stock as of April 12, 2023.

	Before reverse stock split	1-for-5 reverse stock split	1-for-10 reverse stock split
Common stock authorized	100,000,000	100,000,000	100,000,000
Preferred stock authorized	10,000,000	10,000,000	10,000,000
Common stock issued and outstanding	16,659,093	3,331,819	1,665,909
Common stock underlying options and warrants	5,782,602	1,156,520	578,260
Common stock underlying Series A Preferred Stock (1)	729,167	145,833	72,917
Common stock available for grant under existing stock equity plans	1,530,208	306,042	153,021
Common stock authorized and unreserved	83,340,907	96,668,181	98,334,091

(1) Based on the current conversion price of the Series A Preferred Stock.

The amendment to our Certificate of Incorporation will not change the terms of our common stock. The shares of new common stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to the common stock now authorized. The common stock issued and outstanding subsequent to the reverse stock split will remain fully paid and non-assessable. The reverse stock split is not intended as, and will not have the effect of, a "going private transaction" covered by Rule 13e-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). We will continue to be subject to the periodic reporting requirements of the Exchange Act.

Accounting Matters

The reverse stock split will not affect the par value of our common stock. As a result, on the effective date of the reverse stock split, the stated capital account on our balance sheet attributable to the common stock will be reduced by up to 90% of its present amount, as the case may be, based on the ratio for the reverse stock split as determined by our Board of Directors, with the additional paid-in capital account being credited with the amount by which the stated capital account is reduced. The per share net loss and net book value of our common stock will be retroactively adjusted for each period because there will be fewer shares of our common stock outstanding for all periods presented.

Effect of Authorized but Unissued Shares

The implementation of a reverse stock split will have the effect of significantly increasing the number of authorized but unissued shares of common stock. The number of authorized shares of common stock will not be decreased and will remain at 100,000,000. Because the number of outstanding shares will be reduced as a result of the implementation of the reverse stock split, the number of shares available for issuance will be increased accordingly. See the table above under the caption "Principal Effects of the Reverse Stock Split" that shows the number of unreserved shares of common stock that would be available for issuance at various reverse stock split ratios.

Our Board believes that we will need to raise additional capital in the ordinary course of business through the sale of our common stock or preferred stock. In addition, we may issue shares of common stock to acquire other companies or assets, engage in business combination transactions, for the exercise of stock options and warrants, and for stock-based compensation. As of the date of this Proxy Statement, we have no specific plans, arrangements or understandings, whether written or oral, with respect to the increase in shares available for issuance as a result of a reverse stock split being effected.

Potential Anti-Takeover and Dilutive Effects

The purpose of the reverse stock split is not to establish any barriers to a change of control or acquisition of the Company. However, because the number of authorized shares of common stock will remain at 100,000,000, this proposal, if adopted and implemented, will result in a relative increase in the number of authorized but unissued shares of our common stock as compared to the outstanding shares of our common stock and could, under certain circumstances, have an anti-takeover effect. Shares of common stock that are authorized but unissued provide our Board with flexibility to effect, among other transactions, public or private financings, mergers, acquisitions, stock dividends, stock splits and the granting of equity incentive awards. However, these authorized but unissued shares may also be used by our Board, consistent with and subject to its fiduciary duties, to deter future attempts to gain control of us or make such actions more expensive and less desirable. After implementation of the proposed amendment, our Board will continue to have authority to issue additional shares from time to time without delay or further action by the stockholders, except as may be required by applicable law or the Nasdaq listing standards, assuming we remain listed on Nasdaq. Our Board is not aware of any attempt to take control of our company and has not considered the reverse stock split to be a tool to be utilized as a type of anti-takeover device. We currently have no plans, proposals or arrangements to issue any shares of common stock that would become newly available for issuance as a result of the reverse stock split being effected.

In addition, if we do issue additional shares of our common stock, the issuance could have a dilutive effect on earnings per share and the book or market value of the outstanding common stock, depending on the circumstances, and would likely dilute a stockholder's percentage voting power. Holders of common stock are not entitled to preemptive rights or other protections against dilution. Our Board intends to take these factors into account before authorizing any new issuance of shares.

Certain Risks Associated with the Reverse Stock Split

Before voting on this proposal, you should consider the following risks associated with the implementation of the reverse stock split:

- Although we expect that a reverse stock split would result in an increase in the market price of our common stock, we cannot assure you that the reverse stock split, if implemented, will increase the market price of our common stock in proportion to the reduction in the number of shares of common stock outstanding or result in a permanent increase in the market price. The effect a reverse stock split may have on the market price of our common stock cannot be predicted with any certainty, and the history of similar reverse stock splits for companies in similar circumstances to ours is varied. The market price of our common stock is dependent on many factors, including our business and financial performance, capital requirements, general market conditions, prospects for future success, and other factors detailed from time to time in the reports we file with the SEC. Accordingly, the total market capitalization of our common stock after the proposed reverse stock split is effected may be lower than the total market capitalization before the proposed reverse stock split and, in the future, the market price of our common stock following the reverse stock split may not exceed or remain higher than the market price prior to the proposed reverse stock split.
- A reverse stock split may result in some stockholders owning “odd lots” of less than 100 shares of our common stock on a post-split basis. These odd lots may be more difficult to sell, or require greater transaction costs per share to sell, than shares in “round lots” of even multiples of 100 shares.
- While our Board believes that a higher stock price may help generate investor interest, there can be no assurance that the reverse stock split will result in a per share price that will attract institutional investors or investment funds or that such share price will satisfy the investing guidelines of institutional investors or investment funds. As a result, the trading liquidity of our common stock may not necessarily improve.

Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates

If the reverse stock split is approved by our stockholders, the reverse stock split would become effective at such time as an amendment to our Articles of Incorporation is filed with the Secretary of State of the State of Delaware. Even if the reverse stock split proposal is approved by our stockholders, our Board has the discretion to not implement, or to delay in implementing, the reverse stock split. Upon the filing of the amendment to our Articles of Incorporation, all the old common stock will be converted into new common stock as set forth in the amendment.

As soon as practicable after the effective date that the reverse stock split is implemented, stockholders will be notified that the reverse stock split has been effected. If you hold shares of common stock in a book-entry form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective date that the reverse stock split is implemented with instructions as to how to exchange your shares. After you submit your completed transmittal letter, a transaction statement will be sent to your address of record as soon as practicable after the effective date after implementation of the reverse stock split indicating the number of post-reverse stock split shares of common stock you hold.

Some stockholders hold their shares of common stock in certificate form or a combination of certificate and book-entry form. Our transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates, if applicable. If you are a stockholder holding pre-split shares in certificate form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective time of the reverse stock split. The transmittal letter will be accompanied by instructions specifying how you can exchange your certificate representing the pre-split shares of our common stock for a statement of holding. When you submit your certificate representing the pre-split shares of our common stock, your post-split shares of our common stock will be held electronically in book-entry form in the Direct Registration System. This means that, instead of receiving a new stock certificate, you will receive a statement of holding that indicates the number of post-split shares you own in book-entry form. We will no longer issue physical stock certificates unless you make a specific request for a share certificate representing your post-split ownership interest.

Stockholders should not destroy any stock certificate(s) and should not submit any certificate(s) until advised to do so.

Beginning on the effective date of the reverse stock split, each certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

Fractional Shares

No fractional shares will be issued in connection with the reverse stock split. Instead, we will issue one full share of post-reverse stock split common stock to any stockholder who would have been entitled to receive a fractional share as a result of the process. Each common stockholder will hold the same percentage of the outstanding common stock immediately following the reverse stock split as that stockholder did immediately prior to the reverse stock split, except for minor adjustment due to the additional net share fraction that will need to be issued as a result of the treatment of fractional shares.

No Dissenter's Rights

Under the Delaware General Corporation Law, our stockholders are not entitled to dissenter's rights with respect to the reverse stock split proposal or the corresponding amendment to our Articles of Incorporation to effect the reverse stock split and we will not independently provide our stockholders with any such right.

U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following is a summary of certain material U.S. federal income tax consequences of the reverse stock split to the holders of our common stock. It addresses only stockholders who hold our common stock as capital assets. It does not purport to be complete, does not address all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular circumstances, does not address U.S. federal estate or gift taxes, the alternative minimum tax or the Medicare tax on investment income, and does not address stockholders subject to special rules, including without limitation financial institutions, tax-exempt organizations, insurance companies, dealers in securities, foreign stockholders, stockholders who hold their pre-reverse stock split shares as part of a straddle, hedge or conversion transaction, and stockholders who acquired their pre-reverse stock split shares pursuant to the exercise of employee stock options or otherwise as compensation. In addition, this summary does not consider or discuss the tax treatment of partnerships or other pass-through entities or persons that hold our shares through such entities.

This summary is based on the Internal Revenue Code of 1986, as amended (the "Code"), regulations, rulings, and decisions in effect on the date hereof, all of which are subject to change (possibly with retroactive effect) and to differing interpretations. It does not address tax considerations under state, local, foreign and other laws. This summary is for general information purposes only, and the tax treatment of a stockholder may vary depending upon the particular facts and circumstances of such stockholder. Each stockholder is urged to consult with such stockholder's own tax advisor with respect to the tax consequences of the reverse stock split.

The reverse stock split is intended to constitute a "recapitalization" within the meaning of Section 368(a)(1)(E) of the Code for U.S. federal income tax purposes. Assuming that such treatment is correct, the reverse stock split generally will not result in the recognition of gain or loss for U.S. federal income tax purposes, except potentially with respect to any additional fractions of a share of our common stock received as a result of the rounding up of any fractional shares that otherwise would be issued, as discussed below. Subject to the following discussion regarding a stockholder's receipt of a whole share of our common stock in lieu of a fractional share, the adjusted basis of the new shares of common stock will be the same as the adjusted basis of the common stock exchanged for such new shares. The holding period of the new, post-reverse stock split shares of the common stock resulting from implementation of the reverse stock split will include the stockholder's respective holding periods for the pre-reverse stock split shares. Stockholders who acquired their shares of our common stock on different dates or at different prices should consult their tax advisors regarding the allocation of the tax basis of such shares. Additional information about the effects of the reverse stock split on the basis of holders of our common stock will be included in Internal Revenue Service Form 8937, Report of Organizational Actions Affecting Basis of Securities, which we will post to our website on or before the 45th day following the effective date of the reverse stock split, if effected.

As described above in “Fractional Shares”, no fractional shares of our common stock will be issued as a result of the reverse stock split. Instead, we will issue one (1) full share of the post-reverse stock split common stock to any stockholder who would have been entitled to receive a fractional share as a result of the process. The U.S. federal income tax consequences of the receipt of such additional fraction of a share of our common stock are not clear. A stockholder who receives one (1) whole share of our common stock in lieu of a fractional share may recognize income or gain in an amount not to exceed the excess of the fair market value of such share over the fair market value of the fractional share to which such stockholder was otherwise entitled. We are not making any representation as to whether the receipt of one (1) whole share in lieu of a fractional share will result in income or gain to any stockholder, and stockholders are urged to consult their own tax advisors as to the possible tax consequences of receiving a whole share in lieu of a fractional share in the reverse stock split.

We have not sought, and will not seek, any ruling from the Internal Revenue Service or an opinion of tax counsel with respect to the matters discussed herein. The foregoing views are not binding on the Internal Revenue Service or the courts, and there can be no assurance that the Internal Revenue Service or the courts will accept the positions expressed above. The state and local tax consequences of a reverse stock split may vary significantly as to each holder of our common stock, depending upon the state in which such holder resides or does business. Accordingly, each stockholder should consult with their own tax advisor with respect to all of the potential tax consequences to him or her of the reverse stock split.

Vote Required and Recommendation of the Board of Directors

The approval of the Reverse Split Proposal requires the affirmative vote of a majority of our outstanding shares of common stock. Broker non-votes and abstentions will be counted as votes against the proposal.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE “FOR” THIS PROPOSAL TO APPROVE THE AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE SPLIT OF THE COMPANY’S COMMON STOCK.

PROPOSAL 2: VOTE ON PROPOSAL TO ADJOURN THE SPECIAL MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES

We are asking you to vote to approve one or more adjournments of the Special Meeting to a later date or dates, if necessary, or appropriate to solicit additional proxies if there are insufficient votes to approve the Reverse Split Proposal (Proposal 1) at the time of the Special Meeting or we do not have a quorum.

If our stockholders approve this Proposal 2, we could adjourn the Special Meeting and any reconvened session of the Special Meeting and use the additional time to solicit additional proxies, including proxies from stockholders that have previously returned properly executed proxies voting against the approval of the Reverse Split Proposal. Among other things, approval of this Proposal 2 could mean that, even if we had received proxies representing a sufficient number of votes against the approval of the Reverse Stock Proposal such that the Reverse Split Proposal would be defeated, we could adjourn the Special Meeting without a vote on the approval of the Reverse Split Proposal and seek to convince the holders of those shares to change their votes to votes in favor of the Reverse Split Proposal. Additionally, we may seek to adjourn the Special Meeting if a quorum is not present.

Our Board believes that it is in the best interest of the Company and our stockholders to be able to adjourn the Special Meeting to a later date or dates, if necessary, or appropriate to solicit additional proxies in respect of the approval of the Reverse Split Proposal if there are insufficient votes to approve it at the time of the Special Meeting or in the absence of a quorum.

Stockholder Vote Required

In order to be approved, Proposal 2 must be approved by the holders of the majority of the outstanding shares of common stock of the Company present in person or represented by proxy at the Special Meeting and entitled to vote on Proposal 2.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE “FOR” THIS PROPOSAL TO ADJOURN THE SPECIAL MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE INSUFFICIENT VOTES AT THE TIME OF THE SPECIAL MEETING TO APPROVE THE REVERSE SPLIT PROPOSAL

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The table set forth below presents certain information regarding beneficial ownership of our common stock (the only class of our voting equity securities issued and outstanding) as of March 31, 2023 by (i) each person or entity who is known by us to own beneficially more than 5% of our outstanding shares of common stock, (ii) each of our directors, and (iii) all of our directors and executive officers as a group. As of March 31, 2023, there were 16,659,093 shares of our common stock issued and outstanding. In computing the number and percentage of shares beneficially owned by a person, shares of common stock that a person has a right to acquire within sixty (60) days of March 31, 2023 pursuant to stock options, warrants, convertible preferred stock or other rights are counted as outstanding, while these shares are not counted as outstanding for computing the percentage ownership of any other person. This table is based upon information supplied by our directors, officers and principal stockholders and reports filed with the Securities and Exchange Commission. Except as noted, the Company's executive office is reflected as the address of all officers, directors and other stockholders owning more than 5%.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class
Officers and Directors		
Dr. John S. Kovach 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	1,611,284 ⁽¹⁾	9.6%
Bas van der Baan Hogeweg 4-H Amsterdam P7 1098CP	181,875 ⁽²⁾	1.1%
Dr. Stephen J. Forman 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	279,191 ⁽³⁾	1.7%
Dr. Yun Yen 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	321,930 ⁽¹²⁾	1.9%
Dr. René Bernards Koningsvaren 37 Abcoude P7 1391AD	150,000 ⁽⁶⁾	0.9%
Regina Brown 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	334,425 ⁽¹¹⁾	2.0%
Robert N. Weingarten 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	93,749 ⁽¹³⁾	0.6%
Eric J. Forman 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	195,390 ⁽⁵⁾	1.2%
Dr. James S. Miser 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	112,500 ⁽¹⁴⁾	0.7%
All officers and directors as a group (nine persons)	3,280,344	18.2%

Other Stockholders Owning More Than 5%

John and Barbara Kovach 2015 Trust Glenn L. Krinsky, Trustee 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	1,333,333 ⁽⁴⁾	8.0%
Julie Forman 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	1,146,029 ⁽⁷⁾	6.7%
David N. Sterling 16204 Andalucia Lane Delray Beach, Florida 33446	1,000,950 ⁽¹⁷⁾	5.8%
Arthur and Jane Riggs 1990 Irrevocable Trust Jane Riggs, Trustee 4852 Saint Andres Avenue La Verne, California 91750	1,747,500 ⁽⁸⁾	10.0%
Robert and Susan Greenberg 228 Manhattan Beach Boulevard Manhattan Beach, California 90266	1,046,931 ⁽⁹⁾	6.3%
Lalit R. Bahl and Kavita K. Kinra 3 Pheasant Run Setauket, New York 11733	833,333 ⁽¹⁵⁾	5.0%
Hung Tak Ho Mayfair by the Sea II Tower T8, 1/F, Unit A 21 Fo Chun Road Pak ShekKok Taipo NT, Hong Kong SAR	1,084,210 ⁽¹⁰⁾	6.5%
Glenn L. Krinsky 608 East Colorado Boulevard, Suite 180 Pasadena, California 91101	1,474,988 ⁽¹⁶⁾	8.9%

(1) Includes 1,540,184 shares of common stock and stock warrants to purchase 21,100 shares of common stock owned of record by the John S. Kovach Trust. Dr. Kovach is a co-trustee of the Trust and has the exclusive right to control the investment of the assets of the Trust. Also includes stock options to purchase 50,000 shares of common stock owned by Dr. John S. Kovach. All stock options are immediately exercisable or within 60 days.

(2) Includes 10,000 shares of common stock and stock options to purchase 171,875 shares of common stock owned by Bas van der Baan. All stock options are immediately exercisable or within 60 days.

(3) Includes 3,751 shares of common stock and stock options to purchase 183,333 shares of common stock which are immediately exercisable or within 60 days, owned by Dr. Stephen Forman. Also includes 71,054 shares of common stock and stock warrants to purchase 21,053 shares of common stock owned by the Stephen Forman Living Trust dated 12/16/98. Stephen Forman is trustee of the trust and holds voting and dispositive power over the common stock and common stock warrants owned by the trust.

(4) Includes 1,333,333 shares of common stock transferred by John Kovach and his wife, Barbara C.H. Kovach, as grantors, to the John and Barbara Kovach 2015 Trust, an irrevocable trust dated July 6, 2015. The primary beneficiaries of the trust are the two adult daughters of John and Barbara Kovach. Glen L. Krinsky is the trustee of the John and Barbara Kovach 2015 Trust.

(5) Includes stock options to purchase 110,416 shares of common stock owned by Eric J. Forman. All stock options and common stock warrants are immediately exercisable or within 60 days. Eric Forman is the husband of Julie (Schwartzberg) Forman, and the son-in-law of Gil and Debbie Schwartzberg.

Also includes the following:

- 79,710 shares of common stock and stock warrants to purchase 5,264 shares of common stock owned by the Eric Forman Revocable Trust. All stock options and common stock warrants are immediately exercisable or within 60 days.

Excludes the following, as to which Eric Forman disclaims beneficial ownership or control:

- 461,279 shares of common stock and stock options to purchase 472,396 shares of common stock owned by the Julie Schwartzberg Trust, as to which Julie (Schwartzberg) Forman is the trustee and beneficiary.
- 69,721 shares of common stock and common stock warrants to purchase 52,632 shares of common stock owned by the Julie Forman Inherited IRA.
- 87,081 shares of common stock owned by the Julie Forman 2015 Trust, an irrevocable trust, the beneficiaries of which are the minor children of Eric and Julie Forman, as to which Scott Forman, brother of Eric Forman, as trustee, has voting, dispositive and investment control.
- 90,001 shares of common stock owned by each of the Savannah Sterling Trust, Amanda Sterling Trust, Daniel Sterling Trust and Charles Sterling Trust, as to which Julie Forman is the trustee.

(6) Consists of 150,000 shares of common stock.

(7) Includes 318,415 shares of common stock and stock options to purchase 472,396 shares of common stock owned by the Julie Schwartzberg Trust, as to which Julie (Schwartzberg) Forman is the trustee and beneficiary.

Also includes the following:

- 69,721 shares of common stock and common stock warrants to purchase 52,632 shares of common stock owned by the Julie Forman Inherited IRA.
- 90,001 shares of common stock owned by each of the Savannah Sterling Trust, Amanda Sterling Trust, Daniel Sterling Trust and Charles Sterling Trust, as to which Julie Forman is the trustee.
- 142,864 shares of common stock owned by the Schwartzberg Trust fbo Julie Forman, dtd 3/3/23, as to which Julie Forman is the trustee.

Excludes the following, as to which Julie Forman disclaims beneficial ownership or control:

- Stock options to purchase 110,416 shares of common stock owned by Eric J. Forman. All stock options and common stock warrants are immediately exercisable or within 60 days.
- 87,081 shares of common stock owned by the Julie Forman 2015 Trust, an irrevocable trust, the beneficiaries of which are the minor children of Eric and Julie Forman, as to which Scott Forman, brother of Eric Forman, as trustee, has voting, dispositive and investment control.
- 79,710 shares of common stock and stock warrants to purchase 5,264 shares of common stock owned by the Eric Forman Revocable Trust. All stock options and common stock warrants are immediately exercisable or within 60 days.

(8) Includes 1,018,333 shares of common stock and 729,167 shares of common stock issuable upon conversion of 350,000 shares of Series A Convertible Preferred Stock owned by the Arthur and Jane Riggs 1990 Irrevocable Trust dated November 18, 1990. Jane Riggs is the trustee of the Arthur and Jane Riggs 1990 Irrevocable Trust. The shares of Series A Convertible Preferred Stock were acquired on March 17, 2015 and January 15, 2016, are non-voting, and are immediately convertible into common stock.

- (9) Consists of 994,299 shares of common stock and common stock warrants to purchase 385,966 shares of common stock owned by the Greenberg Family Trust dated May 3, 1988. The trust is a revocable trust, and Arthur Greenberg and his wife, Susan Greenberg, are co-trustees of the trust and share voting and dispositive power over the shares of common stock.
- (10) Includes 1,042,105 shares of common stock and stock warrants to purchase 42,105 shares of common stock.
- (11) Includes 6,300 shares of common stock and stock options to purchase 328,125 shares of common stock.
- (12) Includes 52,632 shares of common stock, stock warrants to purchase 52,632 shares of common stock and stock options to purchase 216,666 shares of common stock which are immediately exercisable or within 60 days.
- (13) Consists of stock options to purchase 93,749 shares of common stock which are immediately exercisable or within 60 days.
- (14) Consists of stock options to purchase 112,500 shares of common stock which are immediately exercisable or within 60 days.
- (15) Consists of 833,333 shares of common stock.
- (16) Includes 141,655 shares of common stock owned by Glenn L. Krinsky. Also includes 1,333,333 shares of common stock owned by the John and Barbara Kovach 2015 Trust, as to which Glenn L. Krinsky, as trustee, has voting, dispositive and investment control.
- (17) Includes 142,864 shares of common stock owned by the Schwartzberg Trust fbo David Sterling, dtd 3/3/23, as to which David Sterling is the trustee.

Also includes the following:

- 69,722 shares of common stock and common stock warrants to purchase 52,632 shares of common stock owned by the David Sterling Inherited IRA.
- 263,336 shares of common stock owned by the David N. Sterling Trust, as to which Debbie Schwartzberg is the trustee.

OTHER BUSINESS

As of the date of this Proxy Statement, the management of the Company has no knowledge of any business that may be presented for consideration at the Special Meeting, other than that described above. As to other business, if any, that may properly come before the Special Meeting, or any adjournment thereof, it is intended that the Proxy hereby solicited will be voted in respect of such business in accordance with the judgment of the Proxy holders.

BY ORDER OF THE BOARD OF DIRECTORS

/s/ John S. Kovach

Chief Executive Officer

April 14, 2023

Appendix A

FORM OF CERTIFICATE OF AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO
EFFECT A REVERSE STOCK SPLIT

CERTIFICATE OF AMENDMENT
TO THE CERTIFICATE OF INCORPORATION
OF
LIXTE BIOTECHNOLOGY HOLDINGS, INC.
(a Delaware corporation)

Pursuant to Section 242 of the Delaware General Corporation Law, the undersigned, being the Chief Executive Officer of Lixte Biotechnology Holdings, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), does hereby certify that the following resolutions were adopted by the Corporation's Board of Directors and its stockholders as hereinafter described:

RESOLVED: Article 5 of the Certificate of Incorporation, as amended, of this Corporation is hereby amended by adding the following:

On the effective date of this Certificate of Amendment, the Corporation will effect a reverse stock split (the "Reverse Stock Split") of its outstanding Common Stock pursuant to which every _____ (___) issued and outstanding shares of the Corporation's Common Stock, par value \$0.0001 (the "Old Common Stock") shall be reclassified and converted into one (1) validly issued, fully paid and non-assessable share of Common Stock, par value \$0.0001 (the "New Common Stock"). Each certificate representing shares of Old Common Stock shall thereafter represent the number of shares of New Common Stock into which the shares of Old Common Stock represented by such certificate were reclassified and converted hereby. No fractional shares of the Corporation's New Common Stock shall be issued as a result of the Reverse Stock Split. If the Reverse Stock Split would result in the issuance of any fractional share of New Common Stock, the Corporation shall issue one whole share in lieu of such fractional share. The Reverse Stock Split shall not change the total number of shares of stock that the Corporation shall have authority to issue pursuant to Section 5 of this Certificate of Incorporation.

FURTHER RESOLVED: That the effective date of this Certificate of Amendment shall be _____, 2023.

The foregoing resolutions and this Certificate of Amendment were adopted by the Board of Directors of the Corporation pursuant to board resolutions approved as of _____, 2023, in accordance with Section 141 of the Delaware General Corporation Law, and of holders of a majority of the voting power of the outstanding shares of the Corporation's voting stock at a meeting of stockholders held on May 26, 2023 in accordance with Section 242 of the Delaware General Corporation Law.

IN WITNESS WHEREOF, the undersigned, being the Chief Executive Officer of this Corporation, has executed this Certificate of Amendment to the Corporation's Certificate of Incorporation, as amended, as of _____, 2023.

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

By:

John S. Kovach
Chief Executive Officer

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

SPECIAL MEETING OF STOCKHOLDERS
MAY 26, 2023

THIS REVOCABLE PROXY IS SOLICITED BY THE BOARD OF DIRECTORS

The undersigned hereby appoints _____ and _____, and each or either of them, as the true and lawful attorneys of the undersigned, with full power of substitution and revocation, and authorizes them, and each of them, to vote all the shares of capital stock of Lixte Biotechnology Holdings, Inc. (the "Company") which the undersigned is entitled to vote at said meeting and any adjournment thereof, conferring authority upon such true and lawful attorneys to vote in their discretion on such other matters as may properly come before the meeting and revoking any proxy heretofore given.

THIS PROXY, IF PROPERLY SIGNED AND DATED, WILL BE VOTED AS DIRECTED, BUT IF NO INSTRUCTIONS ARE SPECIFIED IT WILL BE VOTED "FOR" PROPOSALS 1 AND 2.

Should the undersigned be present and elect to vote at the Special Meeting or at any adjournment thereof and after notifying the Company's Corporate Secretary at the Special Meeting of the undersigned's decision to revoke this proxy, then the power of said attorneys and proxies shall be deemed terminated and of no further force and effect. This proxy may also be revoked by sending written notice to the Company's Corporate Secretary at the address set forth on the Notice of Special Meeting, by voting via the Internet at a later time, or by submitting a signed, later-dated proxy prior to a vote being taken on a proposal at the Special Meeting.

The undersigned acknowledges receipt from the Company, prior to the execution of this proxy, of the Notice of Special Meeting and the Proxy Statement for the Special Meeting.

Please complete, sign and date this proxy and return it promptly in the enclosed envelope.

The Board of Directors unanimously recommends a vote "FOR" Proposals 1 and 2.

1. Vote on proposal to amend the Company's certificate of incorporation to effect a reverse stock split of the outstanding shares of its common stock at a split ratio of up to a maximum of a 1-for-10 split, as determined by the Board of Directors in its sole discretion (the "Reverse Split Proposal").

FOR AGAINST ABSTAIN

2. Vote on proposal to adjourn the Special Meeting, if necessary, to solicit additional proxies for approval of the Reverse Split Proposal, in the event that there are not sufficient votes at the time of the Special Meeting to approve such proposal.

FOR AGAINST ABSTAIN

Date: _____

Signature of Stockholder

Signature of Stockholder

Note: Please sign exactly as your name appears on this proxy. When signing as attorney, executor, administrator, trustee or guardian, please give full title. If shares are held jointly, each holder should sign but the signature of only one holder is required.

I agree to receive all future communications related to these holdings electronically via the email address provided below. I understand that I am able to change this selection at any time in the future.

EMAIL ADDRESS: _____

VOTING INSTRUCTIONS ON REVERSE SIDE

VOTING INSTRUCTIONS

You may vote your proxy in the following ways:

Via Internet:

Login to www.envisionreports.com/LIXT
Enter your control number (the 15-digit number located below)

Via Mail:

PROXY SERVICES
C/O COMPUTERSHARE INVESTOR SERVICES
P.O. Box 43101
Providence, RI 02040-5067

CONTROL NUMBER

You may vote by Internet 24 hours a day, 7 days a week. Internet voting is available through 11:59 p.m. Pacific Time on May 25, 2023.

Your Internet vote authorizes the named proxies to vote in the same manner as if you marked, signed and returned your proxy card.
