

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

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

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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

**T2 Biosystems, Inc.**  
(Name of Registrant as Specified In Its Charter)

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

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

No fee required.

Fee paid previously with preliminary materials.

Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11

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**T2 Biosystems, Inc.**

**101 Hartwell Ave.  
Lexington, MA 02421**

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS**

**TO BE HELD ON MARCH 3, 2025**

Notice is hereby given that a special meeting (the “Special Meeting”) of stockholders of T2 Biosystems, Inc. (the “Company”) will be held on March 3, 2025, at 9 a.m., Eastern time. The Special Meeting will be held by means of remote communications, which will be conducted via live webcast on the Internet, providing a consistent experience to stockholders regardless of location. You will be able to attend the meeting online, vote your shares electronically and submit your questions during the Special Meeting by visiting [www.virtualshareholdermeeting.com/TTOO2025SM](http://www.virtualshareholdermeeting.com/TTOO2025SM). There will not be a physical meeting, and you will not be able to physically attend the Special Meeting. Details regarding how to participate in the meeting online and the business to be conducted at the Special Meeting are more fully described in the enclosed proxy statement and the document appended thereto.

The Special Meeting will be held for the following purpose:

1. To approve an amendment to the Company’s certificate of incorporation to effect a reverse stock split of the Company’s common stock, par value \$0.001 per share (the “Common Stock”) at a reverse split ratio ranging from any whole number between and including 1-for-10 and 1-for-100, with the exact ratio within such range to be chosen at the discretion of the Board of Directors, subject to the Board of Directors’ authority to abandon the amendment.

Only T2 Biosystems, Inc. stockholders of record at the close of business on January 7, 2025 (the “Record Date”) will be entitled to notice of and to vote at the Special Meeting and any adjournment, continuation or postponement thereof. A complete list of such stockholders will be open to the examination of any stockholder for a period of ten days prior to the Special Meeting for a purpose germane to the meeting during ordinary business hours at the Company’s principal executive office or by sending an email to [ir@t2biosystems.com](mailto:ir@t2biosystems.com), stating the purpose of the request and providing proof of ownership of our stock. The list of these stockholders will also be available on the bottom of your screen during the Special Meeting after entering the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. Notice of any adjournment of the Special Meeting will be made by announcement at the Special Meeting.

Your vote is important. Whether or not you are able to participate in the Special Meeting, it is important that your shares be represented. To ensure that your vote is recorded promptly, please vote as soon as possible, even if you plan to attend the Special Meeting, by submitting your proxy by telephone, via the Internet at the address listed on the proxy card or by signing, dating and returning the proxy card, which requires no postage if mailed in the United States.

By Order of the Board of Directors,  
/s/ Michael Gibbs  
General Counsel and Secretary

Lexington, Massachusetts  
January 21, 2025

**TABLE OF CONTENTS**

<a href="#">GENERAL INFORMATION</a>	1
<a href="#">OVERVIEW OF PROPOSALS</a>	5
<a href="#">PROPOSAL 1 APPROVAL OF REVERSE STOCK SPLIT</a>	6
<a href="#">SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</a>	17
<a href="#">HOUSEHOLDING OF PROXY MATERIALS</a>	20

**T2 BIOSYSTEMS, INC.  
PROXY STATEMENT  
FOR THE SPECIAL MEETING OF STOCKHOLDERS  
TO BE HELD ON MARCH 3, 2025**

**GENERAL INFORMATION**

The Board of Directors (the “Board of Directors” or “Board”) of T2 Biosystems, Inc. (the “Company”) has delivered printed versions of this Proxy Statement, the proxy card, and related materials to you by mail, in connection with the Board of Directors’ solicitation of proxies for our Special Meeting of Stockholders to be held at 9:00 a.m. Eastern Time on March 3, 2025, and any adjournment, or postponements thereof (the “Special Meeting”). This Proxy Statement and related materials will be distributed on or about January 21, 2025 to our stockholders of record at the close of business on January 7, 2025 (the “Record Date”).

In this Proxy Statement, the terms, the “Company,” “T2 Biosystems,” “we,” “us,” and “our” refer to T2 Biosystems, Inc. and our wholly-owned subsidiary. The mailing address of our principal executive offices is T2 Biosystems, Inc., 101 Hartwell Ave., Lexington, MA 02421.

**How to Attend the Special Meeting**

You may attend the Special Meeting only if you are a T2 Biosystems’ stockholder who is entitled to vote at the Special Meeting, or if you hold a valid proxy for the Special Meeting from a stockholder who is entitled to vote at the Special Meeting. The Special Meeting will be held by means of remote communications and is scheduled to be held on March 3, 2025 at 9:00 a.m., Eastern time, via live webcast through the following link: [www.virtualshareholdermeeting.com/TTOO2025SM](http://www.virtualshareholdermeeting.com/TTOO2025SM). You will need the 16-digit control number provided on your proxy card or on the instructions that accompanied your proxy materials. You may attend the Special Meeting, vote, and submit a question during the Special Meeting by visiting [www.virtualshareholdermeeting.com/TTOO2025SM](http://www.virtualshareholdermeeting.com/TTOO2025SM) and using the 16-digit control number. If you are not a stockholder of record but hold shares as a beneficial owner in “street name”, you should contact your bank or broker to obtain a proxy and a 16-digit control number or otherwise vote through the bank or broker. If you lose your 16-digit control number, you may join the Special Meeting as a “Guest” but you will be not able to vote, ask questions or access the list of stockholders as of the Record Date. The meeting webcast will begin promptly at 9:00 a.m., Eastern time. We encourage you to access the meeting 15 minutes prior to the start time to allow ample time for check-in procedures.

**Reasons for Special Meeting**

We believe that holding the Special Meeting by means of remote communication is in the best interest of the Company and its stockholders. A meeting held by means of remote communication enables increased stockholder attendance and participation because stockholders can participate from any location around the world. Such a meeting can also provide cost savings for our stockholders and us and is also environmentally friendly and sustainable over the long term. Since there will not be a physical meeting location, you will not be able to physically attend the Special Meeting.

**Technical Difficulties**

We will have technicians ready to assist you with any technical difficulties you may have accessing the Special Meeting website. If you encounter any technical difficulties with the virtual meeting platform on the meeting date, please call the technical support number to be provided on the website portal used to access the Special Meeting.

**Question and Answer Session**

As part of the Special Meeting, we will hold a live Q&A session, during which we intend to answer questions submitted during the meeting that are pertinent to the Company and the meeting matters, as time

## Table of Contents

permits. Only stockholders that have accessed the Special Meeting as a stockholder (rather than a “Guest”) by following the procedures outlined above in “How to Attend the Special Meeting” will be permitted to submit questions during the Special Meeting. Each stockholder is limited to no more than two questions. Questions should be succinct and only cover a single topic. We will not address questions that are, among other things:

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

Additional information regarding the Q&A session will be available in the “Rules of Conduct” available on the Special Meeting website for stockholders that have accessed the Special Meeting as a stockholder (rather than a “Guest”) by following the procedures outlined above in “How to Attend the Special Meeting”.

### **Stockholders Entitled to Vote; Record Date**

As of the close of business on January 7, 2025, the record date for determination of stockholders entitled to vote at the Special Meeting (the “Record Date”), 28,045,417 shares of our Common Stock, par value \$0.001 per share (the “Common Stock”) were outstanding and entitled to vote at the Special Meeting.

### **Voting Rights**

Only holders of our Common Stock at the close of business on the Record Date are entitled to receive notice of and to vote at the Special Meeting. Each share of our Common Stock is entitled to one vote on the matter to be voted on at the Special Meeting and stockholders do not have cumulative voting rights.

### **Quorum**

Our amended and restated bylaws provide that both (i) the holders of at least one-third in voting power of the capital stock issued and outstanding and entitled to vote, present in person or by remote communication, if applicable, or represented by proxy, and (ii) the holders of at least one-third in voting power of the Common Stock issued and outstanding and entitled to vote, present in person, or by remote communication, if applicable, or represented by proxy, shall constitute a quorum for the transaction of business at the Special Meeting. Under the General Corporation Law of the State of Delaware (the “DGCL”), shares that are voted “abstain” or “withheld” and broker “non-votes” are counted as present for purposes of determining whether a quorum is present at the Special Meeting.

### **Votes Required for Proposal 1**

Approval of the proposed amendment to our certificate of incorporation to effect a reverse stock split requires that the votes cast “for” the proposed amendment exceed the votes cast “against” the amendment. Broker non-votes and abstentions will not be considered a “vote cast” affirmatively or negatively and will have no effect on the voting for this proposal. You may vote “for,” “against,” or “abstain” with respect to this proposal.

## [Table of Contents](#)

### **Broker Non-Votes**

A broker “non-vote” occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that item and has not received voting instructions from the beneficial owner.

If your shares are held in “street name” by a brokerage firm, your brokerage firm is required to vote your shares according to your instructions. You should direct your broker how to vote the shares held in your account. Under applicable stock exchange rules, if you do not give instructions to your brokerage firm, the brokerage firm will not be allowed to vote your shares with respect to “non-routine” matters.

Proposal 1 is considered a “routine” matter, and your brokerage firm will be able to vote on this proposal even if it does not receive instructions from you. However, broker non-votes may still arise with respect to these matters if the broker does not receive your voting instructions and chooses not to exercise its discretionary authority with respect to such matter.

Broker non-votes will have no effect on the outcome of Proposal 1.

### **Abstentions**

An “abstention” occurs when a stockholder represented at the meeting in person or by proxy makes the affirmative choice not to vote for or against a matter. Abstentions are counted as present and entitled to vote for purposes of determining a quorum. Abstentions will have no effect on the outcome of Proposal 1.

### **Voting**

#### ***Electronically At the Meeting***

The Special Meeting will be held by means of remote communication to allow for greater stockholder participation. Stockholders may participate in the Special Meeting by visiting the following website at the time of the Special Meeting: [www.virtualshareholdermeeting.com/TTOO2025SM](http://www.virtualshareholdermeeting.com/TTOO2025SM). To participate in the Special Meeting, you will need the 16-digit control number included on your proxy card or on the instructions that accompanied your proxy materials. Shares held in your name as the stockholder of record may be voted with a proxy and a 16-digit control number obtained from your bank or broker or otherwise through your bank or broker electronically during the Special Meeting. Shares for which you are the beneficial owner but not the stockholder of record also may be voted electronically during the Special Meeting. However, even if you plan to attend the Special Meeting, the Company recommends that you vote your shares as promptly as possible and in advance over the Internet ([www.proxyvote.com](http://www.proxyvote.com)) or telephone (1-800-579-1639) so that your vote will be counted if you later decide not to attend the Special Meeting. Promptly voting your shares will ensure the presence of a quorum at the Special Meeting and will save us the expense of further solicitation. Submitting your proxy now will not prevent you from voting your shares at the Special Meeting if you desire to do so, since your proxy is revocable at your option.

#### ***By Proxy***

If you do not wish to vote at the Special Meeting or will not attend the Special Meeting, you may vote by proxy. You can vote by proxy over the Internet ([www.proxyvote.com](http://www.proxyvote.com)) or telephone (1-800-579-1639) and by following the instructions provided in the proxy materials. Internet and telephone voting facilities for stockholders of record will be available 24 hours a day and will close at 11:59 p.m., Eastern time, on March 2, 2025. If you complete and submit your proxy before the meeting, the persons named as proxies will vote the shares represented by your proxy in accordance with your instructions. If you submit a proxy without giving voting instructions, your shares will be voted in the manner recommended by the Board of Directors on the matter presented in this Proxy Statement.

**Revocability of Proxy**

You may revoke your proxy by (1) following the instructions in the proxy materials and entering a new vote by mail, over the Internet or via telephone before the Special Meeting or (2) attending the Special Meeting and voting (although attendance at the Special Meeting without voting will not in and of itself revoke a proxy). Any written notice of revocation or subsequent proxy card must be received by our Corporate Secretary prior to the taking of the vote at the Special Meeting. Such written notice of revocation or subsequent proxy card should be sent to our principal executive offices at T2 Biosystems, Inc., 101 Hartwell Ave., Lexington, MA 02421, Attention: Corporate Secretary.

If a broker, bank, or other nominee holds your shares, you must contact them in order to find out how to change your vote, or you may vote at the Special Meeting by following the procedures described above.

**Expenses of Solicitation**

T2 Biosystems is making this solicitation and will pay the entire cost of preparing and distributing the proxy materials and soliciting votes. If you choose to access the proxy materials or vote over the Internet, you are responsible for any Internet access charges that you may incur. Our officers and employees may, without compensation other than their regular compensation, solicit proxies through further mailings, personal conversations, facsimile transmissions, e-mails, or otherwise. Proxy solicitation expenses that we will pay include those for preparation, mailing, returning, and tabulating the proxies.

## OVERVIEW OF PROPOSAL

This Proxy Statement contains one proposal requiring stockholder action: the approval of an amendment to the Company's amended and restated certificate of incorporation, as amended, to effect a reverse stock split of the Company's Common Stock at a reverse split ratio ranging from any whole number between and including 1-for-10 and 1-for-100, with the exact ratio within such range to be chosen at the discretion of the Board of Directors, subject to the Board of Directors' authority to abandon the amendment.

The proposal is discussed in more detail in the pages that follow.

## PROPOSAL 1

### APPROVAL OF AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT

#### General

Our Board of Directors has adopted resolutions approving, and is recommending that our stockholders approve, an amendment to our Restated Certificate of Incorporation, as amended (the “Restated Certificate of Incorporation”) to effect a reverse stock split of our Common Stock at a ratio ranging from any whole number between and including 1-for-10 and 1-for-100, with the exact ratio within such range to be determined at the discretion of the Board of Directors, subject to the Board of Directors’ authority to determine when to file the amendment and to abandon such amendment notwithstanding prior stockholder approval of such amendment. Pursuant to the law of the State of Delaware, our state of incorporation, the Board of Directors must adopt an amendment to our Restated Certificate of Incorporation and submit the amendment to stockholders for their approval. The form of the proposed amendment to our Restated Certificate of Incorporation is attached to this proxy statement as [Appendix A](#).

By approving this proposal, stockholders will approve an amendment to our Restated Certificate of Incorporation pursuant to which any whole number of issued shares of Common Stock between and including ten (10) and one hundred (100), inclusive, would be combined into one share of Common Stock, and authorize our Board of Directors to file only one such amendment with the Secretary of State of the State of Delaware, as determined by our Board of Directors in the manner described herein. Our Board of Directors believes that stockholder approval of an amendment granting our Board of Directors this discretion, rather than approval of a specified reverse stock split ratio, provides our Board of Directors with maximum flexibility to react to then-current market conditions and, therefore, is in the best interests of the Company and its stockholders.

The Board of Directors may effect only one reverse stock split as a result of this authorization. The Board may also elect not to effect any reverse stock split. The Board’s decision as to whether and when to effect the reverse stock split will be based on a number of factors, including the then prevailing market conditions, the historical, existing and expected trading price of our Common Stock, the anticipated impact of the reverse stock split on the trading price and trading volume of our Common Stock and our market capitalization, and the continued listing requirements of The Nasdaq Capital Market. Although our stockholders may approve the reverse stock split, we will not effect the reverse stock split if the Board of Directors does not deem it to be in the best interests of the Company and its stockholders.

The proposed amendment will not reduce the number of authorized shares of our Common Stock (which will remain at 400,000,000) or preferred stock (which will remain at 10,000,000). Because the reverse stock split will decrease the number of issued shares of our Common Stock by a ratio in the range of 1-for-10 to 1-for-100, as determined by the Board of Directors, the amendment would result in a relative increase in the number of shares of our Common Stock available for issuance. For more information on the relative increase in the number of authorized shares of our Common Stock, see “*Effect of the Amendment on the Number of Authorized Shares of our Common Stock*”.

#### Purpose and Background of the Reverse Stock Split

On January 6, 2025, the Board of Directors approved the proposed amendment to our Restated Certificate of Incorporation to effect the reverse stock split for the following reasons:

- The Board of Directors believes that the reverse stock split is our best means of ensuring compliance with the \$1.00 per share of Common Stock minimum bid price requirement for continued listing on The Nasdaq Capital Market and avoid delisting;

## Table of Contents

- The Board of Directors believes that a higher stock price, which may be achieved through a reverse stock split, could help generate investor interest in the Company and help attract, retain, and motivate employees; and
- The Board of Directors believes that some potential employees are less likely to work for the Company if we have a low stock price or are no longer listed on the Nasdaq Capital Market, regardless of size of our overall market capitalization.

### *Nasdaq Requirements for Continued Listing*

Our Common Stock is publicly traded and listed on The Nasdaq Capital Market under the symbol “TTOO.” One of the requirements for continued listing on The Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(a)(2) is maintenance of a minimum closing bid price of \$1.00.

As previously disclosed, on December 12, 2024, the Company received written notice from The Nasdaq Stock Market, LLC (“Nasdaq”) notifying the Company that it was not in compliance with the requirement of Nasdaq Listing Rule 5550(a)(2) for continued listing on the Nasdaq Capital Market as a result of the closing bid price of our Common Stock being below \$1.00 per share for 30 consecutive business days (the “Bid Price Rule”). Pursuant to a prior non-compliance letter from Nasdaq dated November 7, 2024, the Company received a letter from Nasdaq indicating that, for the last thirty consecutive business days, the Market Value of Listed Securities, as defined by Nasdaq (“MVLS”) had been below the \$35 million minimum requirement for continued listing on The Nasdaq Capital Market under Nasdaq Listing Rule 5550(b)(2).

In accordance with the terms of the previously imposed “Mandatory Panel Monitor” as that term is defined in Nasdaq Listing Rule 5815(d)(4)(B), the Nasdaq Listing Qualifications Staff (the “Staff”) did not grant the Company a grace period but rather issued a delist determination, which has been stayed as a result of the Company requesting a hearing with the Nasdaq Hearings Panel (the “Panel”) and paying a non-refundable \$20,000 fee. Further action by Nasdaq has been stayed pending the issuance of the Panel’s decision and the expiration of any extension that may be granted by the Panel to the Company as a result of the hearing, which was held on January 9, 2025. The Company’s common stock will remain listed and eligible to trade on Nasdaq pending the outcome of the hearing. There can be no assurance, however, that the Panel will grant the Company’s request for continued listing or that the Company will evidence compliance with all applicable listing criteria prior to the expiration of any extension that may be granted by the Panel to do so.

The Board of Directors believes that effecting a reverse stock split may be the best means of increasing and maintaining the price of our Common Stock to above \$1.00 per share in compliance with the Bid Price Rule for continued listing on The Nasdaq Capital Market. The Board of Directors believes that continued listing on The Nasdaq Capital Market provides overall credibility to an investment in our stock, given the stringent listing and disclosure requirements of The Nasdaq Capital Market. Notably, some trading firms discourage investors from investing in lower priced stocks that are traded in the over-the-counter market because they are not held to the same stringent standards. Increasing visibility of our stock among a larger pool of potential investors could result in higher trading volumes. Such increases in visibility and liquidity could also help facilitate future financings.

In light of the factors mentioned above, our Board of Directors unanimously approved the proposed amendment to our Restated Certificate of Incorporation to effect the reverse stock split as a potential means of increasing and maintaining the price of our Common Stock to above \$1.00 per share in order to maintain compliance with the Nasdaq listing requirements.

### *Potential Increased Investor Interest*

In approving the proposed amendment to our Restated Certificate of Incorporation, the Board of Directors considered that our Common Stock may not appeal to brokerage firms that are reluctant to recommend lower

priced securities to their clients. Investors may also be dissuaded from purchasing lower priced stocks because the brokerage commissions, as a percentage of the total transaction, tend to be higher for such stocks. Moreover, the analysts at many brokerage firms do not monitor the trading activity or otherwise provide coverage of lower priced stocks.

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

There are risks associated with the reverse stock split, including that the reverse stock split may not result in a sustained increase in the per share price of our Common Stock. There is no assurance that:

- The market price per share of our Common Stock after the reverse stock split will rise in proportion to the reduction in the number of shares of our Common Stock issued immediately before the reverse stock split;
- The reverse stock split will result in a per share price that will increase the level of investment in our Common Stock by institutional investors or increase analyst and broker interest in our Company;
- The reverse stock split will result in a per share price that will increase our ability to attract and retain employees and other service providers;
- The market price per share of our Common Stock will either exceed or remain in excess of the \$1.00 minimum bid price as required by Nasdaq, or that we will otherwise meet the requirements of Nasdaq for continued inclusion for trading on The Nasdaq Capital Market; and
- Nasdaq may delist our Common Stock prior to the vote at the Special Meeting as the Nasdaq Hearings Panel's final decision may arrive before the Special Meeting date.

Stockholders should note that the effect of the reverse stock split, if any, upon the market price of our Common Stock cannot be accurately predicted. In particular, we cannot assure you that the price of a share of our Common Stock after the reverse stock split will be ten (10) to one hundred (100) times, as applicable, the price for a share of our Common Stock immediately prior to the reverse stock split. Furthermore, even if the market price of our Common Stock does rise following the reverse stock split, we cannot assure you that the market price of our Common Stock immediately after the proposed reverse stock split will be maintained for any period of time. Even if an increased per-share price can be maintained, the reverse stock split may not achieve the desired results that have been outlined above. Moreover, because some investors may view the reverse stock split negatively, we cannot assure you that the reverse stock split will not adversely impact the market price of our Common Stock.

The market price of our Common Stock will also be based on our performance and other factors, some of which are unrelated to the reverse stock split or the number of shares outstanding. If the reverse stock split is effected and the market price of our Common Stock declines, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would occur in the absence of a reverse stock split. The total market capitalization of our Common Stock after implementation of the reverse stock split when and if implemented may also be lower than the total market capitalization before the reverse stock split. Furthermore, the liquidity of our Common Stock could be adversely affected by the reduced number of shares that would be outstanding after the reverse stock split.

We believe that the reverse stock split may result in greater liquidity for our stockholders. However, it is also possible that such liquidity could be adversely affected by the reduced number of shares outstanding after the reverse stock split, particularly if the price of our Common Stock does not increase as a result of the reverse stock split.

Even if the reverse stock split is effected, we may not be able to satisfy all of the other requirements for continued listing of our Common Stock on The Nasdaq Capital Market or other stock exchange. As discussed

## [Table of Contents](#)

above, the Board approved the reverse stock split proposal and is submitting it for approval by the stockholders with the primary intent of increasing the market price and minimum bid prices of our Common Stock to regain and maintain compliance with the listing requirements of The Nasdaq Capital Market and to make our Common Stock more attractive to a broader range of institutional and other investors. However, continued listing on such exchange requires compliance with a variety of other qualitative and quantitative listing standards. Even if we effect the reverse stock split, we may not be able to satisfy or maintain listing requirements on The Nasdaq Capital Market or any other stock exchange. We cannot provide any assurances that we will be able to maintain a listing of the Common Stock on The Nasdaq Capital Market or any other stock exchange.

### **Principal Effects of the Reverse Stock Split**

If the stockholders approve this proposal and the Board of Directors implements the reverse stock split, we will amend and restate the first sentence of Article Fourth of our Restated Certificate of Incorporation relating to our authorized capital, in its entirety to read as follows:

“That, effective on the filing of this Certificate of Amendment of Restated Certificate of Incorporation with the Office of the Secretary of State of the State of Delaware (the “Effective Time”), a one-for-[\*] reverse stock split of the Corporation’s Common Stock shall become effective, pursuant to which each [\*] 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. In lieu thereof, (i) with respect to holders of one or more certificates which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, upon surrender after the Effective Time of such certificate or certificates, any holder 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 (the “Fractional Share Payment”) equal to the fraction of which such holder would otherwise be entitled multiplied by the closing price per share on the trading day immediately preceding the Effective Time as reported by The Nasdaq Capital Market (as adjusted to give effect to the Reverse Stock Split); provided that, whether or not fractional shares would be issuable as a result of the Reverse Stock Split shall be determined on the basis of (a) the total number of shares of Common Stock that were issued and outstanding immediately prior to the Effective Time formerly represented by certificates that the holder is at the time surrendering and (b) the aggregate number of shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificates shall have been reclassified; and (ii) with respect to holders of shares of Common Stock in book-entry form in the records of the Company’s transfer agent that were issued and outstanding immediately prior to the Effective Time, any holder 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 the Fractional Share Payment automatically and without any action by the holder.

The total number of shares of capital stock which the Corporation shall have authority to issue is 410,000,000 shares consisting of (a) 400,000,000 shares of Common Stock, \$0.001 par value per share (the “Common Stock”) and (b) 10,000,000 shares of Preferred Stock, \$0.001 par value per share (the “Preferred Stock”).”

\* By approving this amendment, stockholders will approve the combination of any whole number of shares of Common Stock between and including ten (10) and one hundred (100) into one (1) share of Common Stock. The certificate of amendment filed with the Secretary of State of the State of Delaware will include only that reverse stock split ratio determined by the Board of Directors to be in the best interests of the Company and its stockholders. The Board of Directors will not implement any amendment providing for a different reverse stock split ratio.

## [Table of Contents](#)

The reverse stock split will be effected simultaneously for all issued shares of Common Stock and the reverse stock split ratio will be the same for all issued shares of Common Stock. The reverse stock split will affect all of our Common Stockholders uniformly and will not affect any stockholder's percentage ownership interests in the Company, except to the extent that the reverse stock split results in any of our stockholders owning a fractional share. After the reverse stock split, the shares of our Common Stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to our Common Stock now authorized. The reverse stock split will not affect the Company continuing to be subject to the periodic reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

The reverse stock split may result in some stockholders owning "odd-lots" of less than 100 shares of our Common Stock. Brokerage commissions and other costs of transactions in odd-lots are generally higher than the costs of transactions in "round-lots" of even multiples of 100 shares.

Following the effectiveness of any reverse stock split approved by the stockholders and implemented by the Board of Directors, current stockholders will hold fewer shares of Common Stock, with such number of shares dependent on the specific ratio of the reverse stock split. For example, if the Board implements a 1-for-10 reverse stock split, a stockholder owning a "round-lot" of 100 shares of Common Stock immediately prior to the reverse stock split will hold 10 shares of Common Stock immediately following the reverse stock split. THE HIGHER THE REVERSE SPLIT RATIO (1-FOR-100 BEING HIGHER THAN 1-FOR-10, FOR EXAMPLE), THE GREATER THE REDUCTION IN THE NUMBER OF SHARES EACH EXISTING STOCKHOLDER, IMMEDIATELY AFTER THE REVERSE STOCK SPLIT, WILL EXPERIENCE.

In deciding whether to implement the reverse stock split and the specific reverse stock split ratio to be used, the Board of Directors will consider, among other things: (i) the market price of the Common Stock at the time of the reverse stock split; (ii) the number of shares that will be outstanding after the reverse stock split; (iii) the expected number of stockholders following the reverse stock split; (iv) the stockholders' equity at such time; (v) the shares of Common Stock available for issuance in the future; and (vi) the liquidity of the Common Stock in the market and the improved liquidity that may result. The Board of Directors maintains the right to abandon the proposed amendment to our Restated Certificate of Incorporation if it determines, in its sole discretion, that we will be able to satisfy the listing requirements of Nasdaq without implementing the reverse stock split or if the proposed amendment to our Restated Certificate of Incorporation is otherwise no longer in the best interests of the Company.

### **Effect of the Amendment on the Number of Authorized Shares of our Common Stock**

Whether or not the proposed amendment to our Restated Certificate of Incorporation is approved by the Company's stockholders, and if the Board of Directors authorizes the Company to file any such amendment with the Secretary of State of the State of Delaware, on the filing of the certificate of amendment to our Restated Certificate of Incorporation with the Office of the Secretary of State of the State of Delaware (the "Effective Time"), the number of authorized shares of our Common Stock will remain 400,000,000. Because the reverse stock split will decrease the number of outstanding shares of our Common Stock by a ratio in the range of 1-for-10 to 1-for-100, as determined by the Board of Directors, the proposed amendment would result in a relative increase in the number of authorized and unissued shares of our Common Stock. The purpose of the relative increase in the amount of authorized and unissued shares of our Common Stock is to allow our Company the ability to issue additional shares of Common Stock in connection with future financings, employee and director benefit programs and other desirable corporate activities, without requiring our Company's stockholders to approve an increase in the authorized number of shares of Common Stock each time such an action is contemplated. If the proposed amendment to the Restated Certificate of Incorporation is approved, all or any of the authorized and unissued shares of Common Stock may be issued in the future for such corporate purposes and such consideration as the Board of Directors deems advisable from time to time, without further action by the stockholders of our Company and without first offering such shares to our stockholders. When and if additional shares of Common Stock are issued, these new shares would have the same voting and other rights and

## [Table of Contents](#)

privileges as the currently issued and outstanding shares of Common Stock, including the right to cast one vote per share. Except pursuant to our Company's employee and director stock plans, outstanding warrants, Sales Agreement for at-the-market offerings with HC Wainwright, our Company presently has no plan, commitment, arrangement, understanding or agreement regarding the issuance of Common Stock. However, the Company regularly considers its capital requirements and may conduct equity offerings in the future.

Because our stockholders have no preemptive rights to purchase or subscribe for any of our unissued Common Stock, the future issuance of additional shares of Common Stock will reduce our current stockholders' percentage ownership interest in the total outstanding shares of Common Stock. In the absence of a proportionate increase in our future earnings and book value, an increase in the number of our outstanding shares of Common Stock would dilute our projected future earnings per share, if any, and book value per share of all our outstanding shares of the Common Stock. If these factors were reflected in the price per share of our Common Stock, the potential realizable value of a stockholder's investment could be adversely affected. An issuance of additional shares could therefore have an adverse effect on the potential realizable value of a stockholder's investment.

### **Effects of the Reverse Stock Split on our Common Stock**

After the Effective Time of the amendment to our Restated Certificate of Incorporation effecting the reverse stock split, each stockholder will own fewer shares of our Common Stock as a result of the reverse stock split ratio chosen by the Board of Directors. Because the reverse stock split will decrease the number of outstanding shares of our Common Stock, the proposed amendment will result in a relative increase in the number of authorized and unissued shares of our Common Stock available for issuance.

All outstanding options, nonvested restricted stock units, purchase rights and warrants to purchase shares of our Common Stock, including any held by our officers and directors, would be adjusted proportionally pursuant to their terms as a result of the reverse stock split. In particular, the number of shares issuable upon the exercise or settlement of each instrument, as applicable would be proportionally reduced, and the exercise price per share, if applicable, would be proportionally increased, in accordance with the terms of each instrument and based on the ratio of the reverse stock split.

The chart below outlines the capital structure as described in this proposal and prior to and immediately following a possible reverse stock split at certain of the proposed reverse stock split ratios. The number of shares disclosed in the column "Number of shares of Common Stock before reverse stock split" reflects the number of shares as of January 7, 2025. The number of shares disclosed in the columns "Estimated number of shares of Common Stock after reverse stock split" gives effect to the reverse stock split under certain possible split ratios as of January 7, 2025, but without giving effect to the treatment of fractional shares.

	Number of shares of common stock as of January 7, 2025	Estimated number of shares of Common Stock after reverse stock split (3)				
		Ratio of Reverse Stock Split:				
		1:10	1:30	1:50	1:70	1:100
Authorized	400,000,000	400,000,000	400,000,000	400,000,000	400,000,000	400,000,000
Issued and Outstanding	28,045,417	2,804,541	934,847	560,908	400,648	280,454
Issuable under Outstanding Warrants	4,543,261	454,326	151,442	90,864	64,903	45,432
Issuable under Outstanding Stock Options	1,414	141	47	28	20	14

## [Table of Contents](#)

	Number of shares of common stock as of January 7, 2025	Estimated number of shares of Common Stock after reverse stock split (3) Ratio of Reverse Stock Split:				
		1:10	1:30	1:50	1:70	1:100
Issuable under Non-vested Restricted Stock Units	3,151,439	315,143	105,047	63,028	45,020	31,514
Reserved for Issuance (1)	663,168	66,316	22,105	13,263	9,473	6,631
Authorized but Unissued (2)	363,595,301	396,359,533	398,786,512	399,271,909	399,479,936	399,635,955

- (1) Shares reserved for future issuance under the Equity Plans, excluding shares issuable under outstanding stock options, non-vested restricted stock units and purchase rights.
- (2) Shares authorized but unissued represent shares available for future issuance beyond shares outstanding as of January 7, 2025 and shares issuable under outstanding warrants, stock options and non-vested restricted stock units.
- (3) The shares presented are an estimate as we do not know the number of fractional shares that will be required to be paid out in cash following the reverse stock split.

### **STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY CERTIFICATE(S) UNTIL REQUESTED TO DO SO.**

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

#### ***Fractional Shares***

No scrip or fractional shares would be issued if, as a result of the reverse stock split, a stockholder would otherwise become entitled to a fractional interest in a share. Instead, each stockholder will be entitled to receive a cash payment equal to the fraction of which such stockholder would otherwise be entitled multiplied by the closing price per share (as adjusted to give effect to the reverse stock split) on the trading day immediately preceding the Effective Time as reported by The Nasdaq Capital Market. No transaction costs would be assessed to stockholders for the cash payment. Stockholders would not be entitled to receive interest for their fractional shares for the period of time between the Effective Time and the date payment is received.

After the reverse stock split, then-current stockholders would have no further interest in our Company with respect to their fractional shares. A person entitled to a fractional interest in a share would not have any voting, dividend or other rights in respect of their fractional interest except to receive the cash payment as described above. Such cash payments would reduce the number of post-reverse stock split stockholders to the extent that there are stockholders holding fewer than that number of pre-reverse stock split shares within the reverse stock split ratio that is determined by us as described above. Reducing the number of post-reverse stock split stockholders, however, is not the purpose of this proposal.

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders reside, where we are domiciled and where the funds for fractional shares would be deposited, sums due to stockholders in payment for fractional shares that are not timely claimed after the Effective Time may be required to be paid to the designated agent for each such jurisdiction. Thereafter, stockholders otherwise entitled to receive such funds may have to seek to obtain them directly from the state to which they were paid.

## **Effect on Outstanding Stock Options, Restricted Stock Units, Purchase Rights and Warrants**

The Company maintains the 2014 Incentive Award Plan (the “2014 Plan”), the Amended and Restated 2006 Employee, Director and Consultant Stock Plan (the “2006 Plan”), the Inducement Award Plan, and the 2014 Employee Stock Purchase Plan (the “2014 Purchase Plan” and, together with the 2014 Plan, the 2006 Plan and the Inducement Award Plan, the “Equity Plans”), which are designed primarily to provide stock-based incentives to employees and other individual service providers of the Company. We have issued stock options to purchase shares of our Common Stock under the 2014 Plan, the 2006 Plan and the Inducement Award Plan, restricted stock units covering shares of our Common Stock under the 2014 Plan and granted purchase rights to purchase shares of our Common Stock to employees under the 2014 Purchase Plan. As of January 7, 2025, we had 1,414 outstanding stock options under the 2014 Plan, the 2006 Plan and the Inducement Award Plan, 3,151,439 outstanding restricted stock units under the 2014 Plan and up to 377,798 shares of our Common Stock were subject to purchase with respect to the purchase period in effect under the 2014 Purchase Plan on such date. In addition, we have issued to certain entities affiliated with CRG Servicing, LLC (“CRG”) warrants to purchase shares of our Common Stock (the “CRG Warrants”) and, in connection with the issuance of Series A Redeemable Convertible Preferred Stock in August 2022 (the “2022 Preferred Stock”) we issued warrants to the 2022 Preferred Stock investor and we issued warrants to purchase common stock issued to underwriters pursuant to underwriting agreements in both February 2023 and May 2024. As of January 7, 2025, we had issued and outstanding warrants to purchase up to 4,543,261 shares of our Common Stock. In the event of a reverse stock split, our Board of Directors generally has the discretion to determine the appropriate adjustment to awards and purchase rights granted under the Equity Plans. Further, the terms of the warrants, including the CRG Warrants, provide for appropriate adjustments in the event of a stock split. Accordingly, if the reverse stock split is approved by our stockholders and our Board of Directors decides to implement the reverse stock split, as of the Effective Time, the number of all shares issuable upon exercise of outstanding warrants and stock options, settlement of the restricted stock units or under purchase rights, and, if applicable, the exercise price or purchase price will be proportionately adjusted based on the reverse stock split ratio selected by our Board of Directors, subject to the terms of such options, warrants, awards and purchase rights. Our Board of Directors has also authorized the Company to effect any other changes necessary, desirable or appropriate to give effect to the reverse stock split, including any applicable technical, conforming changes.

For example, if a 1-for-100 reverse stock split is effected, as of the record date, the aggregate number of shares issuable under the warrants, stock options, restricted stock units and purchase rights would be approximately 45,432, 31,514, and 700, respectively, representing a 100-fold decrease in the number of shares issuable under those warrants, stock options, restricted stock units and purchase rights. The terms of our outstanding warrants, stock options, restricted stock units and purchase rights do not permit exercise for fractional shares. As such, the number of shares issuable under any individual outstanding stock option, restricted stock unit or purchase right under our Equity Plans shall be rounded down and the number of shares issuable under our warrants shall be rounded up or down as provided for under the specific terms of the warrants, or in the case of certain of our warrants, upon exercise of those warrants the Company shall pay cash amounts for fractional shares that otherwise would be issued. Commensurately, the exercise price under each outstanding warrant and stock option and purchase price under each outstanding purchase right would, except as noted above, be increased by 100 times such that upon exercise, the aggregate exercise price or purchase price payable by the warrant holder or grantee to the Company would remain the same. Furthermore, the aggregate number of shares currently available under our Equity Plans for future stock options and other equity-based grants and purchase rights and any share-based limits in the Equity Plans will be proportionately reduced based on the reverse stock split ratio (rounded down to the nearest share). For example, in the event of a 1-for-100 reverse stock split, as of the Record Date, 280,000 shares that currently remain available for issuance under our 2014 Plan would be adjusted to equal approximately 2,800 shares, 5,370 shares that currently remain available for issuance under our Inducement Award Plan would be adjusted to equal approximately 53 shares, and 377,798 shares that currently remain available for issuance under our 2014 Purchase Plan would be adjusted to equal approximately 3,777 shares, in each case, subject to future potential increases pursuant to the terms of those plans. In addition, the number of shares subject to restricted stock units to be automatically granted in the future under the 2014 Plan pursuant to our non-employee director compensation program will be proportionately reduced based on the reverse stock split ratio (rounded down to the nearest share).

## [Table of Contents](#)

### **Effect on Preferred Stock**

As of the date of this Proxy Statement, there were no issued or outstanding shares of our Preferred Stock and no outstanding options or warrants to purchase shares of our Preferred Stock. The Reverse Stock Split would not impact the number of authorized or outstanding shares of our Preferred Stock.

### **Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates, if Applicable**

If the proposed amendment to our Restated Certificate of Incorporation is approved by the Company's stockholders, and if at such time the Board of Directors still believes that a reverse stock split is in the best interests of the Company and its stockholders, the Board will choose the reverse split ratio, within the range approved by the Company's stockholders. The reverse stock split will become effective at the time of filing of the certificate of amendment setting forth the reverse split ratio chosen by the Board with the Secretary of State of the State of Delaware. At the Effective Time, each share of Common Stock issued and outstanding immediately prior thereto will be combined, automatically and without any action on the part of the stockholders, into a fraction of a share of Common Stock in accordance with the reverse stock split ratio contained in the certificate of amendment.

As soon as practicable after the Effective Time, stockholders will be notified by our transfer agent that the reverse stock split has been effected. If you hold shares of Common Stock in book-entry form, you will not need to take any action to receive post-reverse stock split shares of our Common Stock. As soon as practicable after the Effective Time, the Company's transfer agent will send to your registered address a transmittal letter along with a statement of ownership indicating the number of post-reverse stock split shares of our Common Stock you hold. If applicable, a check representing a cash payment in lieu of fractional shares will also be mailed to your registered address as soon as practicable after the Effective Time (see "Fractional Shares" below).

Some stockholders hold their shares of Common Stock in certificate 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-reverse stock split shares in certificate form, you will receive a transmittal letter from the Company's transfer agent as soon as practicable after the Effective Time. The transmittal letter will be accompanied by instructions specifying how you can exchange your certificate or certificates representing the pre-reverse stock split shares of our Common Stock for a post-split statement of ownership. When you submit your certificate or certificates representing the pre-reverse stock split shares of our Common Stock, your post-reverse stock 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 representing the aggregate number of post-reverse stock split shares you own, you will receive a statement indicating the number of post-reverse stock split shares you own in book-entry form. We will no longer issue physical stock certificates unless you make a specific request for a certificate representing your post-reverse stock split ownership interest.

### **Accounting Matters**

The reverse stock split will not affect the Common Stock capital account on our balance sheet. However, because the par value of our Common Stock will remain unchanged at the Effective Time of the split, the components that make up the Common Stock capital account will change by offsetting amounts. Depending on the size of the reverse stock split the Board of Directors decides to implement, the stated capital component will be reduced to an amount between one-tenth (1/10th) and one-one hundredth (1/100th) of its present amount, and the additional paid-in capital component will be increased with the amount by which the stated capital is reduced. The per share net income or loss and net book value of our Common Stock will be increased because there will be fewer shares of Common Stock outstanding. Prior periods' per share amounts will be restated to reflect the reverse stock split.

## [Table of Contents](#)

### **No Appraisal Rights**

Under the Delaware General Corporation Law, the Company's stockholders will not be entitled to appraisal rights with respect to the reverse stock split, and we do not intend to independently provide stockholders with any such right.

### **No Going Private Transaction**

Notwithstanding the decrease in the number of outstanding shares following the reverse stock split, the Board of Directors does not intend for this transaction to be the first step in a series of plans or proposals of a "going private transaction" within the meaning of Rule 13e-3 of the Exchange Act.

### **Interests of Certain Persons in the Proposal**

Certain of our officers and directors have an interest in this Proposal 1 as a result of their ownership of shares of our Common Stock, as set forth below in the section entitled "Stock Ownership of Certain Beneficial Owners and Management" below. However, we do not believe that our officers or directors have interests in Proposal 1 that are different from or greater than those of any of our other stockholders.

### **Anti-takeover Effects of Proposed Amendment**

Release No. 34-15230 of the staff of the SEC requires disclosure and discussion of the effects of any action, including each of the proposed amendment to our Restated Certificate of Incorporation discussed herein, that may be used as an anti-takeover mechanism. Because the proposed amendment to our Restated Certificate of Incorporation provides that the number of authorized shares of Common Stock will remain 400,000,000, the amendment that is filed with the Secretary of State of the State of Delaware, if any such amendment is so filed, will result in a relative increase in the number of authorized but unissued shares of our Common Stock vis-à-vis the number of outstanding shares of our Common Stock after the reverse stock split and, could, under certain circumstances, have an anti-takeover effect, although this is not the purpose or intent of our Board of Directors. A relative increase in the number of our authorized shares could enable the Board of Directors to render more difficult or discourage an attempt by a party attempting to obtain control of the Company by tender offer or other means. The issuance of Common Stock in a public or private sale, merger or similar transaction would increase the number of outstanding shares entitled to vote, increase the number of votes required to approve a change of control of the Company and dilute the interest of a party attempting to obtain control of the Company. Any such issuance could deprive stockholders of benefits that could result from an attempt to obtain control of the Company, such as the realization of a premium over the market price that such an attempt could cause. Moreover, the issuance of Common Stock to persons friendly to the Board could make it more difficult to remove incumbent officers and directors from office even if such change were favorable to stockholders generally.

As stated above, the Company has no present intent to use the relative increase in the number of authorized shares of our Common Stock for anti-takeover purposes, and the proposed amendment is not part of a plan by the Board of Directors to adopt a series of anti-takeover provisions; however, if the proposed amendment is approved by the stockholders, then a greater number of shares of our Common Stock would be available for such purpose than is currently available. The Company is not aware of any pending or threatened efforts to obtain control of the Company, and the Board of Directors has no present intent to authorize the issuance of additional shares of Common Stock to discourage such efforts if they were to arise.

### **Material United States Federal Income Tax Consequences of the Reverse Stock Split**

The following discussion describes the anticipated material United States Federal income tax consequences to "U.S. holders" (as defined below) of Company capital stock relating to the reverse stock split. This discussion

## [Table of Contents](#)

is based upon the Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations, judicial authorities, published positions of the Internal Revenue Service (“IRS”), and other applicable authorities, all as currently in effect and all of which are subject to change or differing interpretations (possibly with retroactive effect). We have not obtained a ruling from the IRS or an opinion of legal or tax counsel with respect to the tax consequences of the reverse stock split. The following discussion is for information purposes only and is not intended as tax or legal advice. Each holder should seek advice based on the holder’s particular circumstances from an independent tax advisor.

**YOU ARE URGED TO CONSULT YOUR TAX ADVISOR WITH RESPECT TO THE APPLICATION OF THE UNITED STATES FEDERAL INCOME TAX LAWS TO YOUR PARTICULAR SITUATION, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE UNITED STATES FEDERAL ESTATE OR GIFT TAX RULES, OR UNDER THE LAWS OF ANY STATE, LOCAL, FOREIGN OR OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE TREATY.**

For purposes of this discussion, the term “U.S. holder” means a beneficial owner of Company capital stock who is for United States Federal income tax purposes:

- (i) an individual citizen or resident of the United States;
- (ii) a corporation (or other entity treated as a corporation for U.S. Federal income tax purposes) organized under the laws of the United States, any state, or the District of Columbia;
- (iii) an estate with income subject to United States Federal income tax regardless of its source; or
- (iv) a trust that (a) is subject to primary supervision by a United States court and for which United States persons control all substantial decisions or (b) has a valid election in effect under applicable Treasury Regulations to be treated as a United States person.

This discussion assumes that Company capital stock is held as a capital asset within the meaning of Code Section 1221. This discussion does not address all of the tax consequences that may be relevant to a particular Company stockholder or to Company stockholders that are subject to special treatment under United States Federal income tax laws including, but not limited to, banks, financial institutions, tax-exempt organizations, insurance companies, regulated investment companies, real estate investment trusts, entities such as partnerships or s- corporations that are treated as “flow-through” entities, or entities that are disregarded as separate from their owners for tax purposes, persons that are broker-dealers, traders in securities who elect the mark-to-market method of accounting for their securities, or Company stockholders holding their shares of Company capital stock as part of a “straddle,” “hedge,” “conversion transaction,” or other integrated transaction, U.S. expatriates, persons subject to the alternative minimum tax, to persons whose shares constitute “qualified small business stock” for purposes of Code section 1202, or persons who hold their Company capital stock through individual retirement or other tax-deferred accounts. This discussion also does not address the tax consequences to the Company, or to Company stockholders that own 5% or more of the Company’s capital stock, are affiliates of Company, or are not U.S. holders. In addition, this discussion does not address other United States Federal taxes (such as gift or estate taxes or alternative minimum taxes), the tax consequences of the reverse stock split under state, local, or foreign tax laws or certain tax reporting requirements that may be applicable with respect to the reverse stock split. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any of the tax consequences set forth below.

If a partnership (or other entity treated as a partnership for United States Federal income tax purposes) is a Company stockholder, the tax treatment of a partner in the partnership, or any equity owner of such other entity will generally depend upon the status of the person and the activities of the partnership or other entity treated as a partnership for United States Federal income tax purposes.

### ***Tax Consequences of the Reverse Stock Split Generally***

We believe that the reverse stock split will qualify as a “reorganization” under Section 368(a)(1)(E) of the Code. Accordingly, provided that the fair market value of the post-reverse stock split shares is equal to the fair market value of the pre-reverse stock split shares surrendered in the reverse stock split:

- A U.S. holder will not recognize any gain or loss as a result of the reverse stock split;
- A U.S. holder’s aggregate tax basis in his, her, or its post-reverse stock split shares will be equal to the aggregate tax basis in the pre-reverse stock split shares exchanged therefor;
- A U.S. holder’s holding period for the post-reverse stock split shares will include the period during which such stockholder held the pre-reverse stock split shares surrendered in the reverse stock split; and
- For purposes of the above discussion of the basis and holding periods for shares of Company capital stock, and except as provided therein, holders who acquired different blocks of Company capital stock at different times for different prices must calculate their basis and holding periods separately for each identifiable block of such stock exchanged, converted, canceled or received in the reverse stock split.

The receipt of cash in lieu of fractional shares of capital stock pursuant to the reverse stock split will be a taxable transaction for U.S. federal income tax purposes. A holder who receives cash in exchange for shares will generally recognize capital gain or loss for U.S. federal income tax purposes equal to the difference, if any, between the amount of cash received and the holder’s adjusted tax basis in the shares exchanged.

### ***Information Reporting and Backup Withholding***

Cash payments received by a U.S. holder of Company capital stock pursuant to the reverse stock split are subject to information reporting, and may be subject to backup withholding at the applicable rate specified by the U.S. Internal Revenue Service (currently 24%) if the holder fails to provide a valid taxpayer identification number and comply with certain certification procedures or otherwise establish an exemption from backup withholding. Backup withholding is not an additional United States Federal income tax. Rather, the U.S. Federal income tax liability of the person subject to backup withholding will be reduced by the amount of the tax withheld. If backup withholding results in an overpayment of taxes, a refund may be obtained provided that the required information is timely furnished to the IRS.

### **Board Recommendation**

***The Board of Directors recommends a vote “FOR” the approval of the proposed amendment to our Restated Certificate of Incorporation to effect a reverse stock split.***

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

The following table sets forth certain information regarding beneficial ownership of our Common Stock as of January 7, 2025, for: each person known to us to be the beneficial owner of more than five percent of our outstanding Common Stock; each of our named executive officers; each of our directors and nominees; and all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Except as noted by footnote, and subject to community property laws where applicable, we believe based on the information provided to us that the persons and entities named in the table below have sole voting and investment power with respect to all shares of our Common Stock shown as beneficially owned by them. Except as noted by footnote, the address of each beneficial holder named below is 101 Hartwell Ave., Lexington, MA 02421.

## [Table of Contents](#)

The table lists applicable percentage ownership based on 28,045,417 shares of our Common Stock outstanding as of January 7, 2025. The number of shares beneficially owned includes shares of our Common Stock that each person has the right to acquire within 60 days of January 7, 2025, except as noted in the footnotes below, including upon the exercise of stock options and vesting of restricted stock units. These stock options and restricted stock units shall be deemed to be outstanding for the purpose of computing the percentage of outstanding shares of our Common Stock owned by such person but shall not be deemed to be outstanding for the purpose of computing the percentage of outstanding shares of our Common Stock owned by any other person.

Name of Beneficial Owner	Shares Beneficially Owned Title or Class of Securities:	
	Common Stock	
	Shares	Percent
<b>5% or Greater Stockholders</b>		
CRG (1)	10,677,973	38.1%
<b>Named Executive Officers and Directors</b>		
John Sperzel (2)	1,160	*
Michael Gibbs (3)	248	*
John Sprague (4)	248	
Jack Cumming (5)	62	*
David B Elsbree (6)	33	*
Seymour Liebman (7)	1,313	*
Dr. Ninfa M. Saunders (8)	73	*
Robin Toft (9)	6,426	*
Laura Adams (10)	44	*
All executive officers and directors as a group (10 persons) (11)	9,732	*0%

\* Less than 1%.

- (1) Based on a Schedule 13D filed on May 13, 2024, Nathan D. Hukill, CR Group L.P., a Delaware limited partnership (“CR Group”), CRG Partners III L.P., a Delaware limited partnership (“CRG Partners III”), CRG Partners III – Parallel Fund “A” L.P., a Delaware limited partnership (“CRG Parallel Fund A”), CRG Partners III – Parallel Fund “B” (Cayman) L.P., a limited partnership organized under the laws of the Cayman Islands (“CRG Parallel Fund B”), CRG Partners III (Cayman) Lev AIV I L.P., a limited partnership organized under the laws of the Cayman Islands (“CRG Lev AIV”), and CRG Partners III (Cayman) Unlev AIV I L.P., a limited partnership organized under the laws of the Cayman Islands (“CRG Unlev AIV”), share voting and dispositive power with respect to such shares. CRG Parallel Fund A, CRG Parallel Fund B, CRG Lev AIV, CRG Unlev AIV and CRG Partners III are collectively referred to as the “CRG Entities.” CR Group serves as the investment manager for the CRG Entities. CR Group is indirectly controlled by Mr. Hukill. The address of CR Group, the CRG Entities and Mr. Hukill is 1000 Main St., Suite 2500, Houston, TX 77002.
- (2) Consists of (a) 400 shares of Common Stock, (b) options to purchase 600 shares of Common Stock which Mr. Sperzel has the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025 and (c) 160 restricted stock units vesting within 60 days of January 7, 2025.
- (3) Consists of (a) 135 shares of Common Stock, (b) options to purchase 73 shares of Common Stock which Mr. Gibbs has the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025 and (c) 40 restricted stock units vesting within 60 days of January 7, 2025.
- (4) Consists of (a) 141 shares of Common Stock, (b) options to purchase 67 shares of Common Stock which Mr. Sprague has the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025 and (c) 40 restricted stock units vesting within 60 days of January 7, 2025.

## Table of Contents

- (5) Consists of (a) 52 shares of Common Stock and (b) options to purchase 10 shares of Common Stock, which Mr. Cumming has the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025.
- (6) Consists of (a) 23 shares of Common Stock and (b) options to purchase 10 shares of Common Stock which Mr. Elsbree has the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025.
- (7) Based on information set forth in a Schedule 13D filed with the SEC by Canon U.S.A., Inc. on September 21, 2016, this amount includes 1,211 shares held by Canon U.S.A., Inc. Mr. Seymour Liebman is the Executive Vice President, Chief Administrative Officer and General Counsel of Canon U.S.A., Inc. and the Senior Managing Executive Officer of Canon Inc., Japan and may be deemed to have beneficial ownership of the shares held by Canon U.S.A., Inc. Canon U.S.A., Inc. and Mr. Liebman each disclaim beneficial ownership of the shares held directly or indirectly by Canon U.S.A., Inc., except to the extent of its pecuniary interest therein, if any. In addition, this amount consists of (a) 85 shares of Common Stock and (b) options to purchase 17 shares of Common Stock which Mr. Liebman has the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025.
- (8) Consists of 73 shares of Common Stock for Ms. Saunders.
- (9) Consists of 6,426 shares of Common Stock for Ms. Toft.
- (10) Consists of 44 shares of Common Stock for Ms. Adams.
- (11) Consists of (a) 8,701 shares of Common Stock, (b) 777 shares of Common Stock which our directors and executive officers as a group have the right to acquire pursuant to outstanding stock options which are, or will be, immediately exercisable within 60 days of January 7, 2025 and (c) 254 restricted stock units vesting within 60 days of January 7, 2025.

## ADDITIONAL INFORMATION

### Procedure for Submitting Stockholder Proposals

Stockholder proposals, including proposed director nominations, intended to be presented at the 2025 annual meeting of stockholders must satisfy the requirements set forth in the advance notice provision under our bylaws. To be timely for the 2025 annual meeting of stockholders, any such proposal must have been delivered in writing to, or mailed and received by, our Corporate Secretary at our principal executive offices no earlier than September 1, 2025, and no later than October 1, 2025. If the date of the 2025 annual meeting of stockholders is scheduled to take place more than 30 days before or more than 60 days after December 30, 2025, notice by the stockholder must be delivered no earlier than the 120th day prior to the 2025 annual meeting of stockholders and no later than the close of business on the later of (1) the 90th day prior to the 2025 annual meeting or (2) the 10th day following the day on which public disclosure of the 2025 annual meeting date is first made.

In addition, any stockholder proposal, including proposed director nominations, intended to be included in the proxy statement for the 2025 annual meeting of stockholders must also satisfy the SEC regulations under Rule 14a-8 of the Exchange Act, and be received not later than July 21, 2025. If the date of the annual meeting is moved by more than 30 days from the date contemplated at the time of the previous year's proxy statement, then notice must be received within a reasonable time before we begin to print and send proxy materials. If that happens, we will publicly announce the deadline for submitting a proposal in a press release or in a document filed with the SEC.

In addition to satisfying the foregoing requirements under our bylaws, to comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than our nominees for the 2025 annual meeting of stockholders must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act.

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

### Householding of Proxy Materials

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 the Proxy Statement is being delivered to multiple stockholders sharing an address unless we have received contrary instructions. We agree to deliver promptly, upon written or oral request, a separate copy of the proxy materials, as requested, to any stockholder at the shared address to which a single copy of those documents was delivered. If you prefer to receive separate copies of the proxy materials, contact Broadridge Financial Solutions, Inc. at 1-866-540-7095 or in writing at Broadridge, Householding Department, 51 Mercedes Way, Edgewood, New York 11717. If you are currently a stockholder sharing an address with another stockholder and wish to receive only one copy of future proxy materials for your household, please contact Broadridge at the above phone number or address.

Amendment to Restated Certificate of Incorporation of the Company

**CERTIFICATE OF AMENDMENT  
OF  
RESTATED CERTIFICATE OF INCORPORATION  
OF  
T2 BIOSYSTEMS, INC.**

T2 Biosystems, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “Company”), does hereby certify as follows:

FIRST: That, the Board of Directors of the Company duly adopted resolutions by unanimous written consent in accordance with Sections 141(f) and 242 of the General Corporation Law of the State of Delaware, recommending and declaring advisable that the Amended and Restated Certificate of Incorporation of the Company be amended and that such amendment be submitted to the stockholders of the Corporation for their consideration, as follows:

**RESOLVED**, that the first sentence of Article FOURTH of the Restated Certificate of Incorporation of the Corporation, as amended and/or restated to date, be amended and restated in its entirety to read as follows:

“That, effective on the filing of this Certificate of Amendment of Restated Certificate of Incorporation with the Office of the Secretary of State of the State of Delaware (the “Effective Time”), a one-for-[\*] reverse stock split of the Corporation’s Common Stock shall become effective, pursuant to which each [\*] 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. In lieu thereof, (i) with respect to holders of one or more certificates which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, upon surrender after the Effective Time of such certificate or certificates, any holder 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 (the “Fractional Share Payment”) equal to the fraction of which such holder would otherwise be entitled multiplied by the closing price per share on the trading day immediately preceding the Effective Time as reported by The Nasdaq Capital Market (as adjusted to give effect to the Reverse Stock Split); provided that, whether or not fractional shares would be issuable as a result of the Reverse Stock Split shall be determined on the basis of (a) the total number of shares of Common Stock that were issued and outstanding immediately prior to the Effective Time formerly represented by certificates that the holder is at the time surrendering and (b) the aggregate number of shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificates shall have been reclassified; and (ii) with respect to holders of shares of Common Stock in book-entry form in the records of the Company’s transfer agent that were issued and outstanding immediately prior to the Effective Time, any holder 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 the Fractional Share Payment automatically and without any action by the holder.

[Table of Contents](#)

The total number of shares of capital stock which the Corporation shall have authority to issue is 410,000,000 shares consisting of (a) 400,000,000 shares of Common Stock, \$0.001 par value per share (the "Common Stock") and (b) 10,000,000 shares of Preferred Stock, \$0.001 par value per share (the "Preferred Stock")."

SECOND: That, at a special meeting of stockholders of the Corporation, the aforesaid amendment was duly adopted by the stockholders of the Corporation.

THIRD: That, the aforesaid amendment was duly adopted in accordance with the applicable provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President and Chief Executive Officer on this day of \_\_\_\_\_, 2025.

**T2 BIOSYSTEMS, INC.**

By: \_\_\_\_\_  
John Sperzel  
President & Chief Executive Officer



T2 BIOSYSTEMS, INC.  
101 HARTWELL AVENUE  
LEXINGTON, MA 02421



**SCAN TO  
VIEW MATERIALS & VOTE**



**VOTE BY INTERNET**

*Before The Meeting* - Go to [www.proxyvote.com](http://www.proxyvote.com) or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 P.M. Eastern Time on March 2, 2025. 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/TTOO2025SM](http://www.virtualshareholdermeeting.com/TTOO2025SM)

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 March 2, 2025. 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:

V60800-S07093

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

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

T2 BIOSYSTEMS, INC.

The Board of Directors recommends you vote FOR the following proposal:

- To approve an amendment to the Company's restated certificate of incorporation to effect a reverse stock split of the Company's common stock, par value \$0.001 per share (the "Common Stock") at a reverse split ratio ranging from any whole number between and including 1-for-10 and 1-for-100, with the exact ratio within such range to be determined at the discretion of the Board of Directors, subject to the Board of Directors' authority to abandon the amendment.

For    Against    Abstain

      

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 the signatory is a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

\_\_\_\_\_  
Signature [PLEASE SIGN WITHIN BOX]      Date

\_\_\_\_\_  
Signature (Joint Owners)      Date

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

V60801-S07093

**T2 BIOSYSTEMS, INC.  
PROXY STATEMENT  
FOR THE 2025 SPECIAL MEETING OF STOCKHOLDERS  
GENERAL INFORMATION**

Our Board of Directors (the "Board of Directors" or "Board") has made the Proxy Statement and related materials available to you on the Internet, or at your request has delivered printed versions to you by mail, in connection **with the Board of Directors' solicitation of proxies for our 2025 Special Meeting of Stockholders** (the "Special Meeting") to be held at 9:00 a.m., Eastern Time on Monday, March 3, 2025, at [www.virtualshareholdermeeting.com/TTOO2025SM](http://www.virtualshareholdermeeting.com/TTOO2025SM), and any adjournment of the Special Meeting. If you requested printed versions of these materials by mail, they will also include a proxy card for the Special Meeting. The Proxy Statement and related materials will be released on or about January 21, 2025 to our stockholders as of the record date of the Special Meeting.

Pursuant to rules adopted by the Securities and Exchange Commission ("SEC"), we are providing access to our proxy materials over the Internet. Accordingly, we are sending a Notice of Internet Availability of Proxy Materials (the "Internet Notice") to our stockholders as of the record date of the Special Meeting. The mailing of the Internet Notice to our stockholders is anticipated to begin on or about January 21, 2025.

The stockholder hereby appoints John Sprague and Michael Gibbs, or either of them, as proxies, each with the power to appoint their substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of T2 Biosystems, Inc. that the stockholder is entitled to vote at the Special Meeting and any adjournment or postponement thereof.

**THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DESCRIBED HEREIN. IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED IN ACCORDANCE WITH THE BOARD OF DIRECTORS' RECOMMENDATIONS.**

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

Continued and to be signed on reverse side