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 \boxtimes

Filed by a Party other than the Registrant \Box

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

Taysha Gene Therapies, Inc.

(Name of Registrant as Specified In Its Charter)

N/A

(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

Preliminary Proxy Statement- Subject to Completion



3000 Pegasus Park Drive Suite 1430 Dallas, Texas 75247

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held On November 15, 2023

Dear Stockholder:

You are cordially invited to attend a Special Meeting of Stockholders (the "Special Meeting") of **TAYSHA GENE THERAPIES, INC.**, a Delaware corporation (the "Company"). The Special Meeting will be held on November 15, 2023 at 3:00 p.m., Eastern Time and will be a virtual stockholder meeting through which you can listen to the meeting, submit questions and vote online, for the following purpose:

1. To approve an amendment to the Company's Amended and Restated Certificate of Incorporation, as amended to date, to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000. We refer to this proposal as the "Increase in Authorized Shares of Common Stock Proposal" or "Proposal 1."

This item of business is more fully described in the Proxy Statement accompanying this Notice.

The meeting can be accessed by visiting *www.virtualshareholdermeeting.com/TSHA2023SM* and entering the control number included in the proxy card in the enclosed proxy materials. You will not be able to attend the meeting in person.

The record date for the Special Meeting is September 18, 2023. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

Important Notice Regarding the Availability of Proxy Materials for the Virtual Stockholders' Meeting to Be Held on November 15, 2023 at 3:00 p.m., Eastern Time.

The proxy statement is available at http://www.ir.tayshagtx.com.

By Order of the Board of Directors,

Kamran Alam Chief Financial Officer and Corporate Secretary

Dallas, TX

, 2023

You are cordially invited to attend the virtual Special Meeting. You will not be able to attend the Special Meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the enclosed proxy, 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 online if you attend the virtual 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 meeting, you must obtain a proxy issued in your name from that record holder.

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TAYSHA GENE THERAPIES, INC.

3000 Pegasus Park Drive Suite 1430 Dallas, Texas 75247

PROXY STATEMENT

FOR THE 2023 SPECIAL MEETING OF STOCKHOLDERS

November 15, 2023

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why am I receiving these materials?

We have sent you these proxy materials because the Board of Directors (the "Board" or "Board of Directors") of Taysha Gene Therapies, Inc. (sometimes referred to as the "Company" or "Taysha") is soliciting your proxy to vote at the Special Meeting of Stockholders, including at any adjournments or postponements of the meeting. You are invited to attend the Special Meeting to vote on the proposal described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card, or follow the instructions below to submit your proxy over the telephone or through the internet.

We intend to mail these proxy materials on or about , 2023 to all stockholders of record entitled to vote at the Special Meeting.

How do I attend the Special Meeting?

The Special Meeting will be a virtual stockholder meeting held on Wednesday, November 15, 2023 at 3:00 p.m., Eastern Time, through which you can listen to the meeting, submit questions and vote online. The Special Meeting can be accessed by visiting *www.virtualshareholdermeeting.com/TSHA2023SM* and entering the control number included in the proxy card in the enclosed proxy materials. We recommend that you log on a few minutes before the Special Meeting to ensure that you are logged in when the meeting begins. To access the meeting, follow the instructions you will receive in subsequent emails you receive after registration. Information on how to vote online during the Special Meeting is discussed below.

Stockholders attending the virtual meeting will be afforded the same rights and opportunities to participate as they would at an in-person meeting. You will not be able to attend the Special Meeting in person.

We encourage you to access the Special Meeting before it begins. Online check-in will begin approximately 15 minutes before the meeting.

Who can vote at the Special Meeting?

Only stockholders of record at the close of business on September 18, 2023 will be entitled to vote at the Special Meeting. On this record date, there were 186,960,193 shares of common stock outstanding and entitled to vote. Whether or not you participate in the Special Meeting, it is important that you vote your shares.

Stockholder of Record: Shares Registered in Your Name

If on September 18, 2023 your shares were registered directly in your name with the Company's transfer agent, Equiniti Trust Company, LLC, then you are a stockholder of record. As a stockholder of record, you may vote

online during 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 or vote by proxy over the telephone or through the internet as instructed below to ensure your vote is counted.

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

If on September 18, 2023 your shares were held, not in your name, but rather in an account at a brokerage firm, bank or other similar organization, then you are the beneficial owner of shares held in "street name" and these 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, bank 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 online during the meeting unless you request and obtain a valid proxy from your broker, bank or other agent.

What am I voting on?

There is one matter scheduled for a vote:

• To approve an amendment to the Company's Amended and Restated Certificate of Incorporation, as amended to date, to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000 (Proposal 1).

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 the matter 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 online during the Special Meeting, vote by proxy using the enclosed proxy card, vote by proxy over the telephone or vote by proxy through 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 online during the meeting even if you have already voted by proxy.

- To vote online during the meeting, access the Special Meeting materials by following the instructions you will receive in your email and submit an electronic ballot during the meeting.
- To vote using the proxy card, simply complete, sign and date the enclosed 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 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the enclosed proxy card. To ensure your vote is counted, your telephone vote must be received before 11:59 p.m., Eastern Time on November 14, 2023.

• To vote through the internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the company number and control number from the enclosed proxy card. To ensure your vote is counted, your internet vote must be received before 11:59 p.m., Eastern Time on November 14, 2023.

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

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, you should have received a voting instruction form with these proxy materials from that organization rather than from us. Simply complete and mail the voting instruction form to ensure that your vote is counted. Alternatively, you may vote by telephone or over the internet as instructed by your broker or bank. To vote online during the Special Meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker, bank or other agent included with these proxy materials, or contact that organization to request a proxy form. You must also register to attend the meeting at *www.virtualshareholdermeeting.com/TSHA2023SM* using the control number as provided by your broker, bank or other agent.

Internet proxy voting will be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you held as of September 18, 2023.

If I am a stockholder of record and I do not vote, or if I return a proxy card or otherwise vote without giving specific voting instructions, what happens?

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

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted "For" the Increase in Authorized Shares of Common Stock Proposal. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his best judgment.

If I am a beneficial owner of shares held in street name and I do not provide my broker or bank with voting instructions, what happens?

If you are a beneficial owner of shares held in street name and you do not instruct your broker, bank or other agent how to vote your shares, your broker, bank or other agent may still be able to vote your shares in its discretion. Under the rules of the New York Stock Exchange (the "NYSE"), brokers, banks and other securities intermediaries that are subject to NYSE rules may use their discretion to vote your "uninstructed" shares with respect to matters considered to be "routine" under NYSE rules, but not with respect to "non-routine" matters. The NYSE has advised us that Proposal 1 is considered to be "non-routine" under NYSE rules, meaning that your broker may not vote your shares on Proposal 1 in the absence of your voting instructions. However, this remains subject to the final determination from the NYSE regarding whether the proposal is "routine" or "non-routine."

If you are a beneficial owner of shares held in street name, in order to ensure your shares are voted in the way you would prefer, you <u>must</u> provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent.

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 set of proxy materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the proxy cards in the proxy materials 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 our Corporate Secretary at 3000 Pegasus Park Drive, Suite 1430, Dallas, Texas 75247.
- You may attend the Special Meeting and vote online. Simply attending the meeting will not, by itself, revoke your proxy.

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

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

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

When are stockholder proposals and director nominations due for the 2024 Annual Meeting of Stockholders (the "2024 Annual Meeting")?

To be considered for inclusion in the proxy materials for the 2024 Annual Meeting, your proposal must be submitted in writing by January 9, 2024 to 3000 Pegasus Park Drive, Suite 1430, Dallas, Texas 75247. If you wish to nominate an individual for election at, or bring business other than through a stockholder proposal before, the 2024 Annual Meeting, you must deliver your notice to our Corporate Secretary at the address above between February 23, 2024 and March 24, 2024. Your notice to the Corporate Secretary must set forth information specified in our Amended and Restated Bylaws ("Bylaws"), including your name and address and the class and number of shares of our stock that you beneficially own.

If you propose to bring business before an annual meeting of stockholders other than a director nomination, your notice must also include, as to each matter proposed, the following: (1) a brief description of the business desired to be brought before such annual meeting and the reasons for conducting that business at the annual meeting and

(2) any material interest you have in that business. If you propose to nominate an individual for election as a director, your notice must also include, as to each person you propose to nominate for election as a director, the following: (1) the name, age, business address and residence address of the person, (2) the principal occupation or employment of the person, (3) the class and number of shares of our stock that are owned of record and beneficially owned by the person, (4) the date or dates on which the shares were acquired and the investment intent of the acquisition and (5) any other information concerning the person as would be required to be disclosed in a proxy statement soliciting proxies for the election of that person as a director in an election contest (even if an election contest is not involved), or that is otherwise required to be disclosed pursuant to Section 14 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations promulgated under the Exchange Act, including the person's written consent to being named as a nominee and to serving as a director if elected. We may require any proposed nominee to furnish other information as we may reasonably require to determine the eligibility of the proposed nominee to serve as an independent director or that could be material to a reasonable stockholder's understanding of the independence, or lack of independence, of the proposed nominee.

For more information, and for more detailed requirements, please refer to our Bylaws, filed as Exhibit 3.2 to our Current Report on Form 8-K (File No. 001-39536), filed with the Securities and Exchange Commission on September 29, 2020.

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 the Company's nominees for must provide in their notice the additional information required by Rule 14a-19 under the Exchange Act.

How are votes counted?

Votes will be counted by the inspector of election appointed for the Special Meeting, who will separately count "For" and "Against" votes, abstentions and broker non-votes. With respect to Proposal 1, abstentions and broker non-votes will have no effect and will not be counted towards the vote total.

What are "broker non-votes"?

A "broker non-vote" occurs when your broker submits a proxy for the meeting with respect to "routine" matters but does not vote on "non-routine" matters because you did not provide voting instructions on these matters. These un-voted shares with respect to the "non-routine" matters are counted as "broker non-votes." The only proposal for consideration at the Special Meeting is considered a "non-routine" matter under NYSE Rule 452, and, therefore, no broker non-votes can occur at the meeting.

As a reminder, if you are a beneficial owner of shares held in street name, in order to ensure your shares are voted in the way you would prefer, you <u>must</u> provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent.

How many votes are needed to approve the proposal?

Proposal 1, approval of an amendment to the Company's Amended and Restated Certificate of Incorporation to increase the authorized number of shares of common stock from 200,000,000 to 400,000,000 shares, will be considered to be approved if it receives "For" votes from a majority of the votes cast by the holders of shares present in person, by remote communication or represented by proxy at the meeting and entitled to vote on the matter. Abstentions and broker non-votes, which are not considered "votes cast," will have no effect and will not be counted towards the vote total.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present at the meeting or represented by proxy.

On the record date, there were 186,960,193 shares outstanding and entitled to vote. Thus, the holders of 93,480,097 shares must be present or represented by proxy at the meeting to have a quorum.

Abstentions will be counted towards the quorum requirement. Broker non-votes will not be counted towards the quorum requirement. If there is no quorum, either the chairperson of the meeting or the holders of a majority of shares present at the meeting or represented by proxy may adjourn the meeting to another date.

How do I ask a question at the Special Meeting?

Only stockholders of record as of September 18, 2023 may submit questions or comments at the Special Meeting. If you would like to submit a question, you may do so by joining the virtual meeting at *www.virtualshareholdermeeting.com/TSHA2023SM* and typing your question in the box in the meeting portal.

To help ensure that we have a productive and efficient meeting, and in fairness to all stockholders in attendance, you will also find posted our rules of conduct for the Special Meeting when you log in prior to the start of the Special Meeting. In accordance with the rules of conduct, we ask that you limit your remarks to one brief question or comment that is relevant to the Special Meeting or our business and that such remarks are respectful of your fellow stockholders and meeting participants. Our management may group questions by topic with a representative question read aloud and answered. In addition, questions may be ruled out of order if they are, among other things, irrelevant to our business, related to pending or threatened litigation, disorderly, repetitious of statements already made, or in furtherance of the speaker's own personal, political or business interests. Questions will be addressed in the "Question and Answer" portion of the Special Meeting.

What do I do if I have technical difficulties in connection with the Special Meeting?

If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number displayed on the virtual meeting page. Technical support will be available beginning approximately one hour prior to the meeting on November 15, 2023.

Will a list of record stockholders as of the record date be available?

For the ten days ending the day prior to the Special Meeting, a list of our record stockholders as of the close of business on the record date will be available for examination by any stockholder of record for a legally valid purpose at our corporate headquarters during regular business hours. To access the list of record stockholders beginning November 5, 2023, and until the meeting, stockholders should email *IR@tayshagtx.com*.

How can I find out the results of the voting at the Special Meeting?

Preliminary voting results will be announced at the Special Meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the Special Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

What proxy materials are available on the internet?

The proxy statement is available at *http://www.ir.tayshagtx.com*.

PROPOSAL 1

APPROVAL OF THE INCREASE IN AUTHORIZED SHARES OF COMMON STOCK PROPOSAL

General

The Board has approved an amendment to our Amended and Restated Certificate of Incorporation, as amended to date, to increase the number of authorized shares of common stock from 200,000,000 to 400,000,000 (the "Authorized Shares Amendment"). The Authorized Shares Amendment will not change the number of authorized shares of preferred stock, which currently consists of 10,000,000 shares of preferred stock.

Of the 200,000,000 shares of common stock that are currently authorized, as of September 18, 2023, 186,960,193 shares of common stock were issued and outstanding, 525,000 shares of common stock were reserved for issuance upon the exercise of outstanding warrants that we issued in April 2023, 8,164,047 shares of common stock were reserved for issuance upon the exercise of outstanding stock options, 409,717 shares of common stock were reserved for issuance upon the exercise and 1,240,421 shares were reserved for issuance pursuant to our equity incentive plans, including our employee stock purchase plan.

The additional shares of common stock authorized for issuance by the Authorized Shares Amendment would be a part of the existing class of common stock and, if and when issued, would have the same rights and privileges as the common stock presently issued and outstanding. The full text of the proposed Authorized Shares Amendment, which would be filed as a Certificate of Amendment to our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware, is attached to this Proxy Statement as Appendix I. However, the text of the Authorized Shares Amendment is subject to revision as may be required by the Secretary of State of the State of Delaware or as the Board deems necessary and advisable to effect the Authorized Shares Amendment.

Provided our stockholders approve the Authorized Shares Amendment, the increased number of shares would be authorized for issuance, but such shares would remain unissued until such time as the Board approves a specific issuance of shares. Other than future issuances under our equity compensation plans and future issuances of our securities pursuant to the exercise of pre-funded warrants issued under the Purchase Agreement (described below), we currently have no plans or arrangements to issue the additional authorized shares of common stock resulting from the Authorized Shares Amendment.

If the proposed Authorized Shares Amendment is approved by our stockholders, it will become effective upon the filing of the Certificate of Amendment with the Secretary of State of the State of Delaware. We plan to file such Certificate of Amendment as soon as practicable after the Special Meeting. However, the Board reserves its right to elect not to proceed with and abandon the Authorized Shares Amendment if it determines, in its sole discretion at any time, that this proposal is no longer in the best interests of our stockholders.

Background and Purpose of the Authorized Shares Amendment

Our Obligations Under the Purchase Agreement

On August 14, 2023, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with certain institutional and other accredited investors (the "Purchasers"), pursuant to which we agreed to sell and issue to the Purchasers in a private placement transaction that closed on August 16, 2023: (i) 122,412,376 shares of our common stock and (ii) with respect to certain Purchasers, pre-funded warrants (the "Pre-Funded Warrants") to purchase 44,250,978 shares of common stock in lieu of shares of common stock.

The Pre-Funded Warrants are only exercisable into common stock upon the approval by our stockholders of this Authorized Shares Amendment and our filing of the Certificate of Amendment to our Amended and Restated

Certificate of Incorporation with the Secretary of State of the State of Delaware. Pursuant to the Purchase Agreement, we agreed to seek to obtain stockholder approval of the Authorized Shares Amendment by December 31, 2023. If we do not obtain such stockholder approval by December 31, 2023, we are required to pay liquidated damages of 2.0% of the aggregate purchase price paid by each holder of Pre-Funded Warrants, and we are obligated to cause an additional stockholder meeting to be held every three months thereafter until stockholder approval of the Authorized Shares Amendment is obtained (each, a "Subsequent Stockholder Approval Deadline"). For any subsequent failure to obtain such stockholder approval by any Subsequent Stockholder Approval Deadline, we are required to pay an additional 2.0% as liquidated damages.

Our Future Liquidity Needs and Going Concern

Our operations have consumed substantial amounts of cash since inception, and we expect to continue to incur significant expenses and operating losses for the foreseeable future. To date we have no products approved for commercialization and have not generated any revenue from product sales. Rather, we have financed our operations through other means, primarily the sale of our securities in equity financings, including pursuant to the Purchase Agreement. We expect to continue to incur significant expenses and operating losses over the next several years as we conduct clinical trials of our product candidates, initiate future clinical trials of our product candidates, advance our preclinical programs, seek marketing approval for any product candidates that successfully complete clinical trials and advance any of our other product candidates we may develop or otherwise acquire. We will require additional capital to fund the research and development of our product candidates, to fund our manufacturing activities, to fund precommercial activities of our programs and for working capital and general corporate purposes.

Based on our forecast as of the date of the issuance of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, including the net proceeds from the sale of securities under the Purchase Agreement, we believed that we had sufficient cash to maintain our planned operations into the third quarter of 2025. In September 2023, we announced that we intended to discontinue development of, and seek external strategic options for, our GAN clinical program, which we believe extends our cash runway into the fourth quarter of 2025. However, given the inherent uncertainties in the forecast, we considered both quantitative and qualitative factors that were known or reasonably knowable as of the filing date of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 and concluded that there were conditions present in the aggregate that raised substantial doubt about our ability to continue as a going concern. We made a similar conclusion about our ability to continue as a going concern in our Annual Report on Form 10-K for the year ended December 31, 2022.

Our success in achieving our business objectives, and our ability to continue as a going concern, depend on our ability to raise additional capital in the future, and the Board believes it is in the best interests of the Company and its stockholders to have sufficient flexibility to issue additional shares in the future on a timely basis if such need arises in connection with potential financings, business combinations or other corporate purposes. Approval of the Authorized Shares Amendment would enable us to take advantage of market conditions, the availability of more favorable financings and opportunities for business combinations and other strategic transactions, without the potential delay and expense associated with convening a special stockholders' meeting.

Our Continued Ability to Attract, Retain and Motivate Employees

Our success also depends in part on our continued ability to attract, retain and motivate highly qualified management and key personnel, which is of particular concern in the competitive biopharmaceutical industry. If the Authorized Shares Amendment is not approved by our stockholders, the lack of unissued and unreserved authorized shares of common stock to provide future equity incentive opportunities could adversely impact our ability to achieve these goals to retain employees.

In short, if our stockholders do not approve this proposal, we may not be able to access the capital markets, complete corporate collaborations or partnerships, attract, retain and motivate employees and pursue other business opportunities integral to our growth and success. Further, the Board is recommending the Authorized Shares Amendment to reserve the number of shares required for potential issuance upon the exercise of the

Pre-Funded Warrants sold under the Purchase Agreement and to avoid the obligation to pay liquidated damages as set forth in the Purchase Agreement.

Effect of the Authorized Shares Amendment

The additional common stock to be authorized by adoption of the Authorized Shares Amendment would have rights identical to our currently outstanding common stock. Adoption of the Authorized Shares Amendment would not affect the rights of the holders of currently outstanding common stock, except for effects incidental to increasing the number of shares of our common stock outstanding, such as dilution of the earnings per share, if any, book value per share and voting power and percentage interest of the current holders of common stock, in each case to the extent that any additional shares of common stock are ultimately issued out of the increase in authorized shares proposed in the Authorized Shares Amendment. The proposed increase in the number of authorized shares of common stock will not, by itself, have an immediate dilutive effect on our current stockholders. However, if the Authorized Shares Amendment is approved, unless otherwise required by applicable law or stock exchange rule, the Board will be able to issue the additional shares of common stock from time to time in its discretion without further action or authorization by the stockholders. We currently have no specific plans, arrangements or understandings to issue additional shares of common stock (excluding any shares of common stock, and the vesting and settlement of outstanding restricted stock units). The newly authorized shares of common stock would be issuable for any proper corporate purpose, including capital raising transactions of equity or convertible debt securities, the establishment of collaborations or other strategic agreements, stock splits, stock dividends, issuance under current or future equity incentive plans, future acquisitions, investment opportunities or for other corporate purposes.

Potential Anti-Takeover Effect of the Authorized Shares Amendment

An increase in the number of authorized but unissued shares of common stock relative to the number of outstanding shares of common stock may also, under certain circumstances, be construed as having an anti-takeover effect. Although not designed or intended for such purposes, the effect of the Authorized Shares Amendment might be to render more difficult or to discourage a merger, tender offer, proxy contest or change in control of us and the removal of management, which stockholders might otherwise deem favorable. For example, the authority of the Board to issue common stock might be used to create voting impediments or to frustrate an attempt by another person or entity to effect a takeover or otherwise gain control of us because the issuance of additional common stock would dilute the voting power of the common stock then outstanding. Our common stock could also be issued to purchasers who would support the Board in opposing a takeover bid which our Board determines not to be in our best interests and those of our stockholders. In addition to the Authorized Shares Amendment, the Amended and Restated Certificate of Incorporation and our Bylaws also include other provisions that may have an anti-takeover effect. These provisions, among other things, permit the Board to issue preferred stock with rights senior to those of the common stock without any further vote or action by the stockholders, provide that special meetings of stockholders may only be called by the majority of our Board and certain of our officers and do not provide for cumulative voting rights, all of which could make it more difficult for stockholders to effect certain corporate actions and may delay or discourage a change in control. The Board is not presently aware of any attempt, or contemplated attempt, to acquire control of the Company, and the Authorized Shares Amendment is not part of any plan by the Board to recommend or implement a series of anti-takeover measures.

Vote Required

Approval of the Increase in Authorized Shares of Common Stock Proposal requires "FOR" votes from a majority of the votes cast by the holders of shares present in person, by remote communication or represented by proxy at the meeting and entitled to vote on the matter. As noted above, we believe that this proposal will be considered a

"non-routine" matter and, as a result, since the only proposal for consideration at the Special Meeting is considered a "non-routine" matter under NYSE Rule 452, no broker non-votes can occur at the meeting. Abstentions and broker non-votes, which are not considered "votes cast," will have no effect and will not be counted towards the vote total.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "<u>FOR</u>" THE APPROVAL OF THE INCREASE IN AUTHORIZED SHARES OF COMMON STOCK PROPOSAL.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of the Company's common stock as of September 18, 2023 by: (i) each director; (ii) each of our named executive officers; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock.

	Beneficial Ownership(1)		
Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
Greater than 5% stockholders			
Entities affiliated with FMR LLC ₍₂₎	27,158,335	14.53%	
Entities affiliated with Paul B. Manning ₍₃₎	23,476,333	12.55%	
RA Capital Healthcare Fund, L.P. ₍₄₎	18,472,503	9.88%	
Entities affiliated with RTW Investments, LP ₍₅₎	16,893,185	9.04%	
Entities affiliated with Venrock ₍₆₎	14,444,444	7.73%	
TCG Crossover Fund I, LP ₍₇₎	11,111,111	5.94%	
Named Executive Officers and Directors			
Sean P. Nolan ₍₈₎	1,598,715	*	
RA Session II ₍₉₎	9,153,927	4.90%	
Kamran Alam ₍₁₀₎	266,322	*	
Sukumar Nagendran, M.D. (11)	102,864	*	
Phillip B. Donenberg ₍₁₂₎	186,601	*	
Kathleen Reape, M.D. ₍₁₃₎	65,160	*	
Laura Sepp-Lorenzino, Ph.D. ₍₁₄₎	65,160	*	
John A. Stalfort III (15)	1,933,671	1.03%	
All current executive officers and directors as a group (7 persons) (16)	4,218,493	2.25%	

* Represents ownership of less than one percent.

(1) This table is based upon information supplied by officers, directors and principal stockholders and Schedules 13D and 13G filed with the SEC. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, the Company believes that each of the stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 186,960,193 shares outstanding on September 18, 2023, adjusted as required by rules promulgated by the SEC. Except as otherwise noted below, the address for persons listed in the table is c/o Taysha Gene Therapies, Inc., 3000 Pegasus Park Drive, Suite 1430, Dallas, Texas 75247.

(2) Consists of (i) 15,715,577 shares of common stock held by Fidelity Select Portfolios: Biotechnology Portfolio ("Fidelity Biotechnology Portfolio"), (ii) 936,201 shares of common stock held by Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund ("Fidelity Series Growth Company Fund"), (iii) 3,547,617 shares of common stock held by Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund ("Fidelity Growth Company Fund"), (iv) 5,244,563 shares of common stock held by Fidelity Growth Company Commingled Pool, and (v) 1,714,377 shares of common stock held by Fidelity Mt. Vernon Street Trust: Fidelity Growth Company K6 Fund"). Fidelity Biotechnology Portfolio, Fidelity Series Growth Company Fund, Fidelity Growth Company K6 Fund"). Fidelity Growth Company K6 Fund "Fidelity Growth Company K6 Fund are managed by direct or indirect subsidiaries of FMR LLC. Abigail P. Johnson is a director, the chairman and the chief executive officer of

FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act (the "Fidelity Funds"), advised by Fidelity Management & Research Company LLC ("FMR Co. LLC"), a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees. FMR Co. LLC carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address of the principal place of business of these persons, funds and accounts is 245 Summer Street, Boston, MA 02210.

- (3) Consists of (i) 16,466,667 shares of common stock held by the Paul B. Manning Revocable Trust dated May 10, 2020 (the "PBM Revocable Trust"), (ii) 4,837,407 shares of common stock held by the PBM 2023 Grantor Retained Annuity Trust (the "PBM Annuity Trust"), (iii) 2,091,704 shares of common stock held by BKB Growth Investments, LLC ("BKB"), (iv) 22,000 shares of common stock held by BKB G2 Investments, LLC ("BKB2") and (v) 58,555 shares of common stock issuable upon the exercise of options held by Paul B. Manning that are exercisable within 60 days of September 18, 2023. Mr. Manning is the trustee of the PBM Revocable Trust and has sole voting and dispositive power over the shares held by the PBM Revocable Trust. Mr. Manning is co-manager of Tiger Lily Capital, LLC, the manager of BKB and BKB2 and has shared voting and dispositive power over the shares held by BKB and BKB2. The address of the principal place of business of each of these persons and entities is 200 Garrett Street, Suite S, Charlottesville, VA 22902.
- (4) Consists of 18,472,503 shares of common stock held by RA Capital Healthcare Fund, L.P. Such amount does not include 42,638,607 shares of common stock issuable upon exercise of a Pre-Funded Warrant purchased by RA Capital Healthcare Fund, L.P. in the Private Placement. The Pre-Funded Warrants may not be exercised until the filing of the Charter Amendment following receipt of the Stockholder Approval or if the aggregate number of shares of common stock beneficially owned by entities affiliated with RA Capital Healthcare Fund, L.P. immediately following such exercise would exceed 9.99% of the total number of shares of our common stock then issued and outstanding after giving effect to such exercise. RA Capital Management, L.P. is the investment manager for RA Capital Healthcare Fund, L.P. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky and Rajeev Shah are the managing members. Each of Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the securities held by RA Capital Healthcare Fund. L.P. The principal business address of these persons and entities is 200 Berkeley Street, 18th Floor, Boston, MA 02116.
- (5) Consists of (i) 9,683,503 shares of common stock held by RTW Master Fund, Ltd., (ii) 6,826,919 shares of common stock held by RTW Innovation Master Fund, Ltd., and (iii) 382,763 shares of common stock held by RTW Biotech Opportunities Fund, Ltd. Such amounts do not include 924,243, 651,596, and 36,532 shares of common stock issuable upon exercise of Pre-Funded Warrants purchased by RTW Master Fund, Ltd., RTW Innovation Master Fund, Ltd. and RTW Biotech Opportunities Fund, Ltd (collectively, the "RTW Funds"), respectively, in the Private Placement. The Pre-Funded Warrants may not be exercised until the filing of the Charter Amendment following receipt of the Stockholder Approval or if the aggregate number of shares of common stock beneficially owned by entities affiliated with RTW Investments, LP ("RTW"), immediately following such exercise would exceed 9.99% of the total number of shares of our common stock then issued and outstanding after giving effect to such exercise. RTW, in its capacity as the investment manager of the RTW Funds, has the power to vote and the power to direct the disposition of the shares held by the RTW Funds. Accordingly, RTW may be deemed to be the beneficial owner of such securities. Roderick Wong, M.D., as the Managing Partner of RTW, has the power to direct the vote and disposition of the securities held by RTW. Dr. Wong disclaims beneficial ownership of the shares held by

the RTW Funds, except to the extent of his pecuniary interest therein. The address and principal office of RTW Investments, LP is 40 10th Avenue, Floor 7, New York, NY 10014, and the address of Dr. Wong and each of the RTW Funds is c/o RTW Investments, LP, 40 10th Avenue, Floor 7, New York, NY 10014.

- (6) Consists of (i) 10,267,111 shares of common stock held by Venrock Healthcare Capital Partners EG, L.P. ("VHCP EG"), (ii) 3,797,444 shares of common stock held by Venrock Healthcare Capital Partners III, L.P. ("VHCP III") and (iii) 379,889 shares of common stock held by VHCP Co-Investment Holdings III, LLC ("VHCP Co-III"). VHCP Management III, LLC ("VHCPM") is the sole general partner of VHCP III and the sole manager of VHCP Co-III. VHCP Management EG, LLC ("VHCPM EG") is the sole general partner of VHCP EG. Dr. Bong Koh and Nimish Shah share the power to vote and dispose of the securities held by VHCPM and VHCPM EG. The principal business address of these persons and entities is 7 Bryant Park, 23rd Floor, New York, NY 10018.
- (7) Consists of 11,111,111 shares of common stock held by TCG Crossover Fund I, LP. TCG Crossover GP I, LLC is the general partner of TCG Crossover Fund I, LP and Chen Yu is the sole managing member of TCG Crossover GP I, LLC and holds voting and dispositive power with respect to these securities. The principal business address of these persons and entities is 705 High Street, Palo Alto, CA 94301.
- (8) Consists of (i) 1,535,545 shares of common stock held by Nolan Capital LLC, (ii) 1,170 shares of common stock held by Sean P. Nolan, and (iv) 62,000 shares of common stock issuable upon the exercise of options held by Sean P. Nolan that are exercisable within 60 days of September 18, 2023. Sean P. Nolan is the President of Nolan Capital LLC and has shared voting and dispositive power with respect to the shares held by Nolan Capital LLC.
- (9) Consists of (i) 8,871,747 shares of common stock, (ii) 141,090 shares of common stock held by the Session 2020 Annuity Trust I, of which Mr. Session is the trustee and has sole voting and investment power with respect to the shares held by such trust and (iii) 141,090 the Session 2020 Annuity Trust II, of which Mr. Session is the trustee and has sole voting and investment power with respect to the shares held by such trust.
- (10) Consists of (i) 156,570 shares of common stock and (ii) 109,752 shares of common stock issuable upon the exercise of options exercisable within 60 days of September 18, 2023.
- (11) Consists of (i) 34,226 shares of common stock and (ii) 68,638 shares of common stock issuable upon the exercise of options exercisable within 60 days of September 18, 2023.
- (12) Consists of (i) 114,111 shares of common stock and (ii) 72,490 shares of common stock issuable upon the exercise of options exercisable within 60 days of September 18, 2023.
- (13) Consists of 65,160 shares of common stock issuable upon the exercise of options exercisable within 60 days of September 18, 2023.
- (14) Consists of 65,160 shares of common stock issuable upon the exercise of options exercisable within 60 days of September 18, 2023.
- (15) Consists of (i) 1,049,381 shares of common stock and (ii) 884,290 shares of common stock held by the John A. Stalfort III 2018 Irrevocable Trust ("the Stalfort Trust"). Gineane Holly Stalfort as trustee of the Stalfort Trust has the power to vote and dispose of the securities held by the Stalfort Trust.
- (16) Consists of (i) 3,775,293 shares of common stock and (ii) 443,200 shares of common stock issuable upon the exercise of options exercisable within 60 days of September 18, 2023.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries, such as brokers, to satisfy the delivery requirements for proxy statement materials with respect to two or more stockholders sharing the same address by delivering a single set of these materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

For this meeting, a number of brokers with account holders who are our stockholders will be "householding" the Company's proxy materials. A single set of Special Meeting materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate set of Special Meeting materials, please notify your broker or us. Direct your written request to Taysha Gene Therapies, Inc., Attention: Corporate Secretary, 3000 Pegasus Park Drive, Suite 1430, Dallas, Texas 75247. Stockholders who currently receive multiple copies of the Special Meeting materials at their addresses and would like to request "householding" of their communications should contact their brokers.

OTHER MATTERS

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 such matters in accordance with their best judgment.

By Order of the Board of Directors,

Kamran Alam Chief Financial Officer and Corporate Secretary

Dated: , 2023

Appendix I CERTIFICATE OF AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF TAYSHA GENE THERAPIES, INC.

Taysha Gene Therapies, Inc. (the "*Company*"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "*DGCL*"), hereby certifies that:

First: The name of the Company is Taysha Gene Therapies, Inc., and that this corporation was originally incorporated in Texas pursuant to the Texas Business Organizations Code.

Second: That the Company subsequently converted to a corporation incorporated under the DGCL and filed the Certificate of Incorporation on February 13, 2020 under the name Taysha Gene Therapies, Inc., which was amended and restated on March 4, 2020 and July 2, 2020, amended on July 28, 2020 and September 16, 2020 and amended and restated on September 28, 2020.

Third: The Board of Directors of the Company, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions to amend its Amended and Restated Certificate of Incorporation as follows:

Article IV, Section A shall be amended and restated to read in its entirety as follows:

"The Company is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares of all classes of capital stock which the Company shall have authority to issue is four hundred million (400,000,000) shares shall be Common Stock (the "*Common Stock*"), each share having a par value of \$0.00001, and ten million (10,000,000) shares shall be Preferred Stock (the "*Preferred Stock*"), each share having a par value of \$0.00001."

Fourth: Thereafter pursuant to a resolution of the Board of Directors, this Certificate of Amendment was submitted to the stockholders of the Company for their approval, and was duly adopted at a special meeting of the stockholders of the Company, in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

In Witness Whereof, the Company on has caused this Certificate of Amendment to be signed by its Chief Executive Officer this _____ day of ______, 2023.

Taysha Gene Therapies, Inc.

By:

Name: Sean P. Nolan Title: Chief Executive Officer





VOTE BY INTERNET Before The Meeting - Go to <u>www.proxyvote.com</u> 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 November 14, 2023. 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/TSHA2023SM

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 November 14, 2023. 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:

V23454-S73303

KEEP THIS PORTION FOR YOUR RECORDS

____ DETACH AND RETURN THIS PORTION ONLY

	VALID ONET WHEN SIGNED AND DATED.				
TAYSHA GENE THERAPIES, INC.					
The Board of Directors recommends you vote FOR the following proposal:			For	Against	Abstain
 To approve an amendment to the Company's Amended and Restated Certific authorized shares of common stock from 200,000,000 to 400,000,000. 	ate of Incorporation, as amended to date, to increase	the number of			
NOTE: In their discretion, the proxies are authorized to vote upon such other busi continuation, or postponement thereof.	less as may properly come before the meeting or an	ıy adjournment,			
Please sign exactly as your name(s) appear(s) hereon. When signing as att administrator, or other fiduciary, please give full title as such. Joint owners sl personally. All holders must sign. If a corporation or partnership, please sign in partnership name by authorized officer.	ould each sign				
Signature [PLEASE SIGN WITHIN BOX] Date	Signature (Joint Owners)	Date			

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting: The Notice and Proxy Statement is available at www.proxyvote.com.

TAYSHA GENE THERAPIES, INC. Special Meeting of Stockholders November 15, 2023 3:00 p.m., Eastern Time This proxy is solicited by the Board of Directors

The stockholder(s) acknowledge(s) receipt of the Notice of the Special Meeting of Stockholders of Taysha Gene Therapies, Inc. and the Proxy Statement and hereby appoint(s) Sean P. Nolan and Kamran Alam, or either of them, as proxies, each with the power to appoint his substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of Taysha Gene Therapies, Inc. that the stockholder(s) is/are entitled to vote at the Special Meeting of Stockholders to be held at 3:00 p.m., Eastern Time on Wednesday, November 15, 2023, which will be a virtual stockholder meeting through which you can listen to the meeting, submit questions and vote online at www.virtualshareholdermeeting.com/TSHA2023SM, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations. The above named proxies are authorized to vote in their discretion upon such other business as may properly come before the meeting or any adjournments, continuations, or postponements thereof.

Continued and to be signed on reverse side