

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

SCHEDULE 14A

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

Filed by the Registrant ☒

Filed by a Party other than the Registrant ☐

Check the appropriate box:

- ☐ Preliminary Proxy Statement
- ☐ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- ☒ Definitive Proxy Statement
- ☐ Definitive Additional Materials
- ☐ Soliciting Material under §240.14a-12

Xilio Therapeutics, Inc.
(Name of Registrant as Specified In Its Charter)

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

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

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



828 Winter Street, Suite 300
Waltham, Massachusetts 02451

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
To Be Held on February 23, 2026

Dear Stockholders:

You are cordially invited to attend a special meeting of stockholders of Xilio Therapeutics, Inc. to be held on February 23, 2026 at 11:00 a.m., Eastern Standard Time, virtually at www.virtualshareholdermeeting.com/XLO2026SM.

At the special meeting, stockholders will consider and vote on the following matters:

1. Adoption and approval of an amendment to our restated certificate of incorporation, or the Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our issued shares of common stock at a ratio within a range of not less than 1-for-2 and not greater than 1-for-30, with the exact ratio within such range and the implementation and timing of such reverse stock split to be determined at the sole discretion of our board of directors, without further approval or authorization of our stockholders; and
2. Approval of an adjournment of the special meeting to a later date or dates, if necessary or appropriate, to permit further solicitation and vote of proxies in the event that there are insufficient votes for, or otherwise in connection with, the approval of Proposal 1 described above.

We are using the "full set delivery" method of providing proxy materials to all stockholders of record. Because we have elected to utilize the "full set delivery" option, we are delivering to all stockholders of record paper copies of the enclosed proxy statement and the related proxy card, as well as providing access to the proxy materials on a publicly accessible website. We began distributing the enclosed proxy statement, this notice and the proxy card on or about January 26, 2026. The proxy statement and other proxy materials are also available at www.proxyvote.com.

Only stockholders of record at the close of business on January 13, 2026, the record date for the special meeting, are entitled to notice of and to vote at the special meeting or any adjournment or postponement thereof. As noted above, our special meeting will be a virtual meeting of stockholders, which will be conducted exclusively via the internet as a virtual web conference. You will be able to attend the special meeting online, vote your shares during the special meeting and submit questions for consideration during the special meeting through www.virtualshareholdermeeting.com/XLO2026SM. Please carefully review the enclosed proxy statement and the notice of availability for additional details.

Your vote is important, and we encourage all stockholders to attend the special meeting online. Whether or not you plan to attend the special meeting online, we encourage you to read the enclosed proxy statement and submit your proxy or voting instructions as soon as possible by following the instructions in the enclosed proxy statement and the accompanying proxy card and submitting your proxy by the internet or telephone, or by signing, dating and returning your proxy card or voting instruction form. Please review the instructions on each of your voting options described in the enclosed proxy statement and proxy card. Further information about how to register for and attend the special meeting online, vote your shares and submit questions for consideration at the meeting is included in the enclosed proxy statement.

Thank you for your ongoing support and continued interest in Xilio Therapeutics, Inc.

By Order of the Board of Directors,

A handwritten signature in black ink, appearing to be "René Russo".

René Russo, Pharm.D.
President and Chief Executive Officer

Waltham, Massachusetts
January 26, 2026

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828 Winter Street, Suite 300
Waltham, Massachusetts 02451
(857) 524-2466

**PROXY STATEMENT
SPECIAL MEETING OF STOCKHOLDERS
To Be Held on February 23, 2026**

INFORMATION CONCERNING SOLICITATION AND VOTING

This proxy statement and the enclosed proxy card are being furnished in connection with the solicitation of proxies by the board of directors of Xilio Therapeutics, Inc., or Xilio, for use at the special meeting of stockholders, or special meeting, to be held virtually on February 23, 2026 at 11:00 a.m., Eastern Standard Time, and at any adjournment thereof.

The special meeting will be held exclusively online as a virtual meeting at www.virtualshareholdermeeting.com/XLO2026SM. There will not be a physical meeting location, and stockholders will not be able to attend the special meeting in person. Further information about how to attend the special meeting online, vote your shares and submit questions during the meeting is included in this proxy statement.

In this proxy statement, unless expressly stated or the context otherwise requires, references to "Xilio," "the company," "we," "us," "our" and similar terms refer to Xilio Therapeutics, Inc. References to our website are inactive textual references only, and the contents of our website are not incorporated by reference into this proxy statement.

We are distributing this proxy statement and the related proxy card to stockholders on or about January 26, 2026. All properly submitted proxies will be voted in accordance with the instructions contained in those proxies. If no instructions are specified, the shares represented by the proxies will be voted in accordance with the recommendation of our board of directors. If you are a stockholder of record, you may change your vote or revoke your proxy at any time before it is exercised at the meeting by following the instructions set forth in this proxy statement.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS

This proxy statement is available for viewing, printing and downloading at www.proxyvote.com. In addition, this proxy statement is available on the website of the Securities and Exchange Commission, or SEC, at www.sec.gov and the "Investors & Media - Financials & Filings - SEC Filings" section of our website, which is located at <https://ir.xiliotx.com>. Instructions regarding how to submit your proxy or voting instructions are available in this proxy statement and the enclosed proxy card.

IMPORTANT INFORMATION ABOUT THE SPECIAL MEETING AND VOTING

Why Did I Receive These Proxy Materials?

We have made these materials available to you on the internet in connection with the solicitation of proxies for use at our special meeting of stockholders to be held online on Monday, February 23, 2026 at 11:00 a.m., Eastern Standard Time, at www.virtualshareholdermeeting.com/XLO2026SM. As a holder of common stock, you are invited to attend the special meeting online and are requested to vote on the items of business described in this proxy statement. This proxy statement includes information that we are required to provide to you under applicable SEC rules and regulations and that is designed to assist you in voting your shares.

Purpose of the Special Meeting

At the special meeting, our stockholders will consider and vote on the following matters:

1. Adoption and approval of an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our issued shares of common stock at a ratio within a range of not less than 1-for-2 and not greater than 1-for-30, with the exact ratio within such range and the implementation and timing of such reverse stock split to be determined at the sole discretion of our board of directors, without further approval or authorization of our stockholders (Proposal 1);
2. Approval of an adjournment of the special meeting to a later date or dates, if necessary or appropriate, to permit further solicitation and vote of proxies in the event that there are insufficient votes for, or otherwise in connection with, the approval of Proposal 1 described above (Proposal 2);
3. The transaction of any other business that may properly come before the special meeting or any adjournment or postponement thereof.

As of the date of this proxy statement, we are not aware of any business to come before the meeting other than the first two items noted above. Should any other business come before the special meeting, the persons named on the company's proxy card will have discretionary authority to vote the shares represented by such proxies. If you hold shares through a broker, bank or other nominee as described below, we expect that they will not be able to vote your shares on any other business that comes before the special meeting unless they receive instructions from you with respect to such matter.

Board of Directors Recommendation

Our board of directors unanimously recommends that you vote:

- **FOR** the adoption and approval of an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split; and
- **FOR** the approval of an adjournment of the special meeting to a later date or dates, if necessary or appropriate, to permit further solicitation and vote of proxies in the event that there are insufficient votes for, or otherwise in connection with, the approval of Proposal 1.

Availability of Proxy Materials

The proxy materials, including this proxy statement and the notice of meeting are available for viewing, printing and downloading at www.proxyvote.com.

Who Can Vote at the Special Meeting?

Only stockholders of record at the close of business on January 13, 2026, the record date for the special meeting, are entitled to notice of and to vote at the special meeting or any adjournment or postponement thereof. As of the record date, there were 67,540,930 shares of our common stock outstanding and entitled to vote at the special meeting. Each share of common stock that you own as of the record date is entitled to one vote on each matter properly brought before the special meeting.

Difference Between a "Stockholder of Record" and a Beneficial Owner of Shares Held in "Street Name"

- **Stockholder of Record.** If your shares are registered directly in your name with our transfer agent, Computershare Trust Company, then you are considered the "stockholder of record" of those shares. In this case, this proxy statement and the related proxy card have been sent to you directly by us. You may vote your shares by following the instructions in this proxy statement

and the enclosed proxy card and submitting your proxy by the internet or telephone, or by signing, dating and returning your proxy card or voting instruction form.

- **Beneficial Owner of Shares Held in Street Name.** If your shares are held by a bank, broker or other nominee, then you are considered the beneficial owner of those shares, which are held in “street name.” In this case, your proxy materials will be sent to you by that organization. The organization holding your shares is considered the stockholder of record for purposes of voting at the special meeting. As the beneficial owner, you have the right to instruct that organization as to how to vote the shares held in your account by following the instructions contained on the voting instruction card provided to you by that organization.

How to Virtually Attend the Special Meeting

The special meeting will start at 11:00 a.m., Eastern Standard Time, on February 23, 2026 and will be a virtual meeting of stockholders where stockholders will participate by accessing a website using the internet. There will not be a physical meeting location. We believe that hosting a virtual meeting will facilitate stockholder attendance and participation at our special meeting by enabling stockholders to participate from any location around the world. We have designed the virtual special meeting to provide the same rights and opportunities to participate as stockholders would have at an in-person meeting, including the right to vote and ask questions during the meeting through the virtual meeting platform.

Stockholders of record as of January 13, 2026 will be able to attend and participate in the special meeting by accessing www.virtualshareholdermeeting.com/XLO2026SM. You may log into the virtual meeting starting at 10:45 a.m., Eastern Standard Time, on the day of the meeting. To join the special meeting, you will need to have your 16-digit control number, which is included on your voting instruction form or your proxy card. In the event that you do not have a control number, please contact your broker, bank, or other nominee as soon as possible so that you can be provided with a control number and gain access to the special meeting. Stockholders will also have the opportunity to submit questions during the special meeting through www.virtualshareholdermeeting.com/XLO2026SM. A technical support telephone number will be posted on the log-in page that you can call if you encounter any difficulties accessing the virtual meeting during the check-in or during the meeting.

How to Vote and Voting Deadlines

If you are the stockholder of record of your shares, meaning that your shares are registered in your name in the records of our transfer agent, Computershare Trust Company, N.A., and not in the name of a bank, brokerage firm or other nominee, you can vote your shares by proxy prior to the special meeting or online during the special meeting as follows:

- **By internet prior to the special meeting.** You may transmit your proxy and vote via the internet by following the instructions provided in this proxy statement and on the proxy card. You will need to have your voting instruction form or proxy card in hand when you access the website. The website for voting is available at www.proxyvote.com. Proxies submitted via the internet must be received by 11:59 p.m., Eastern Standard Time, on February 22, 2026, the day before the special meeting, for your proxy to be valid and your vote to count.
- **By telephone prior to the special meeting.** You may transmit your proxy and vote over the phone by calling 1-800-690-6903 and following the instructions provided in this proxy statement and on the proxy card. You will need to have your 16-digit control number in hand when you call. Proxies submitted by telephone must be received by 11:59 p.m., Eastern Standard Time, on February 22, 2026, the day before the special meeting, for your proxy to be valid and your vote to count.
- **By mail prior to the special meeting.** You can vote by mail by marking, signing, and dating the enclosed proxy card and then mailing the proxy card in accordance with the instructions on the proxy card. If you vote by mail, you do not need to vote over the internet or by telephone. Proxies submitted by mail must be received by Broadridge Financial Solutions, Inc. no later than February 22, 2026, the day before the special meeting, for the proxy to be valid and your vote to count. If you return your proxy card but do not specify how you want your shares voted on any particular matter, they will be voted in accordance with the recommendations of our board of directors.
- **Online during the special meeting.** You may vote your shares during the special meeting by going to www.virtualshareholdermeeting.com/XLO2026SM and following the instructions on that website for submitting your vote. You will need the 16-digit control number included on your voting instruction form or your proxy card. If you vote by proxy prior to the special meeting and choose to attend the special meeting online, there is no need to vote again during the special meeting unless you wish to change your vote.

If the special meeting is adjourned or postponed, the foregoing deadlines may be extended.

If your shares are held in “street name,” meaning your shares are held for your account by an intermediary, such as a bank, brokerage firm or other nominee, then you are deemed to be the beneficial owner of your shares, and the bank, brokerage firm or other nominee that actually holds the shares for you is the record holder and is required to vote the shares it holds on your behalf according to your instructions. The proxy materials, as well as voting and revocation instructions, should have been forwarded to you by the bank, broker or other nominee that holds your shares. In order to have your broker or other nominee vote your shares, you will need to follow the instructions that your bank, broker or other nominee provides you. The voting deadlines and availability of telephone and internet voting for beneficial owners of shares held in “street name” will depend on the voting processes of the bank, broker or other nominee that holds your shares. Therefore, we urge you to carefully review and follow the voting instruction card and any other materials that you receive from that organization.

Under applicable stock exchange rules, banks, brokerage firms and other nominees may use their discretion to vote “uninstructed” shares (i.e., shares of record held by banks, brokers or other nominees, but with respect to which the beneficial owner of such shares has not provided instructions on how to vote on a particular proposal) with respect to matters that are considered to be “discretionary,” but not with respect to “non-discretionary” matters. With respect to non-discretionary items for which you do not give your broker voting instructions, your shares will be treated as broker non-votes. A “broker non-vote” occurs when shares held by a bank, brokerage firm or other nominee are not voted with respect to a particular proposal because the bank, brokerage firm or other nominee does not have or did not exercise discretionary authority to vote on the matter and has not received voting instructions from its client. For a discussion of how broker non-votes will be treated, see the discussion under “Votes Required to Approve Each Proposal.”

Regardless of whether your shares are held in street name, you are welcome to attend the special meeting online. To do so, you will need your control number included on your proxy card or voting instruction form in order to demonstrate proof of beneficial ownership.

Even if you plan to attend the special meeting online, we urge you to vote your shares by proxy in advance of the special meeting so that if you become unable to attend the special meeting, your shares will be voted as directed by you.

Can I Vote My Shares by Filling Out and Returning the Notice of Internet Availability of Proxy Materials?

No. The notice of availability contains instructions on how to vote by proxy via the internet, by telephone, by returning a paper proxy card, or by voting online while virtually attending the special meeting.

How Do I Submit a Question at the Special Meeting?

If you wish to submit a question during the special meeting, beginning at 10:45 a.m., Eastern Standard Time, on February 23, 2026, you may log into the virtual meeting platform using the unique link provided to you via e-mail following the completion of your registration at www.virtualshareholdermeeting.com/XLO2026SM and follow the instructions there. Our virtual meeting will be governed by our Rules of Conduct and Procedures which will be posted at www.virtualshareholdermeeting.com/XLO2026SM during the special meeting. The Rules of Conduct and Procedures will address the ability of stockholders to ask questions during the meeting, including rules on permissible topics and rules for how questions and comments will be recognized and disclosed to meeting participants.

May I See a List of Stockholders Entitled to Vote as of the Record Date?

A complete list of registered stockholders as of the close of business on the record date will be available for inspection by our stockholders of record at least 10 days prior to the special meeting during normal business hours at our headquarters at 828 Winter Street, Suite 300, Waltham, MA 02451. If you are unable to inspect this list in person, please contact our Corporate Secretary by mail at Xilio Therapeutics, Inc., 828 Winter Street, Suite 300, Waltham, Massachusetts 02451, Attention: Corporate Secretary, or by e-mail at investors@xiliotx.com to request such list. When making such request, please ensure that you have your voting instruction form or proxy card available so that you can prove that you are a registered stockholder.

Quorum

A majority of our shares of common stock outstanding as of the record date must be present or represented by proxy to constitute a quorum and hold the special meeting. For purposes of determining whether a quorum exists, we count as present any shares that are voted over the internet, by telephone, by mail or that are represented at the virtual special meeting. Further, for purposes of establishing a quorum, we will count as present shares that a stockholder holds even if the stockholder votes to abstain or only votes on one of the proposals. If a quorum is not present, we expect to adjourn the special meeting until we obtain a quorum. Votes cast by proxy will be tabulated by the inspector of election appointed for the special meeting, who will also determine whether a quorum is present.

Votes Required to Approve Each Proposal

- **Proposal 1 - Adoption and Approval to Effect a Reverse Stock Split:** Adoption and approval of an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our issued shares of common stock at a ratio within a range of not less than 1-for-2 and not greater than 1-for-30, with the exact ratio within such range and the implementation and timing of such reverse stock split to be determined at the sole discretion of our board of directors, without further approval or authorization of our stockholders.

To approve Proposal 1, the affirmative vote of a majority of the votes cast on the matter is required. Proposal 1 is expected to be considered a discretionary matter under applicable rules. If your shares are held in street name by banks, brokers or other agents and you do not provide voting instructions with respect to your shares, we expect that your bank, broker or other agent will have the discretionary authority to vote your shares on Proposal 1. Abstentions and broker non-votes, if any, will have no effect on the outcome of Proposal 1.

- **Proposal 2 - Approval of Proposal to Adjourn:** To approve the proposal to adjourn the special meeting to a later date or dates, the affirmative vote of a majority of the votes cast on the matter is required. Proposal 2 is expected to be considered a discretionary matter under applicable rules. If your shares are held in street name by banks, brokers or other agents and you do not provide voting instructions with respect to your shares, we expect that your bank, broker or other agent will have the discretionary authority to vote your shares on Proposal 2. Abstentions and broker non-votes, if any, will have no effect on the outcome of Proposal 2.

Revoking a Proxy; Changing Your Vote

If you are a stockholder of record, you may revoke your proxy and change your vote at any time before the vote is taken at the special meeting. To do so, you must do one of the following:

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

If your shares are held in “street name,” you may submit new voting instructions by contacting your bank, broker or other nominee holding your shares. You may also vote online during the special meeting, which will have the effect of revoking any previously submitted voting instructions, if you follow the procedures described in the “How to Vote and Voting Deadlines” section above.

Your virtual attendance at the special meeting, without voting online during the special meeting, will not automatically revoke your proxy.

Costs of Proxy Solicitation

We will bear the costs of soliciting proxies and tabulating your votes. In addition to solicitation by mail, our directors, officers and employees may solicit proxies personally, by telephone, e-mail or in person without additional compensation for the solicitation, but these directors, officers and employees may be reimbursed for out-of-pocket expenses incurred in connection with the solicitation. Copies of solicitation materials will be furnished to brokerage firms, fiduciaries, and other custodians who hold shares of our common stock of record for beneficial owners for forwarding to such beneficial owners. We may reimburse banks, brokers and other holders of record for their reasonable, out-of-pocket expenses for forwarding these proxy materials to beneficial owners.

Voting Results

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

Whom Should I Contact With Any Additional Questions?

If you hold your shares directly or have additional questions about the special meeting, please contact us at Xilio Therapeutics, Inc., 828 Winter Street, Suite 300, Waltham, Massachusetts 02451, Attn: Investor Relations, or by e-mail at investors@xiliotx.com.

If your shares are held in street name, please call the telephone number provided on your voting instruction form or contact your bank, brokerage firm or other nominee directly.

PROPOSAL 1 – ADOPTION AND APPROVAL OF AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, TO EFFECT A REVERSE STOCK SPLIT AT A RATIO WITHIN A RANGE OF NOT LESS THAN 1-FOR-2 AND NOT GREATER THAN 1-FOR-30, WITH THE EXACT RATIO WITHIN SUCH RANGE AND THE IMPLEMENTATION AND TIMING OF SUCH REVERSE STOCK SPLIT TO BE DETERMINED AT THE SOLE DISCRETION OF THE BOARD OF DIRECTORS, WITHOUT FURTHER APPROVAL OR AUTHORIZATION OF OUR STOCKHOLDERS

General

On December 9, 2025, our board of directors unanimously approved and declared advisable an amendment (attached as Appendix A to this proxy statement), or the Reverse Split Charter Amendment, to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split, or the Reverse Split, of our issued shares of common stock at a ratio within a range of not less than 1-for-2 and not greater than 1-for-30, or the Ratio Range, with the exact ratio within such range and the implementation and timing of such Reverse Split to be determined at the sole discretion of our board of directors. As further described below, if this proposal is adopted and approved by our stockholders and our board of directors determines that the Reverse Split would be in the best interests of our company and its stockholders, our board of directors may determine to effect the Reverse Split at any time prior to the one-year anniversary of the date on which the Reverse Split is adopted and approved by our stockholders at the special meeting by a ratio of not less than 1-for-2 and not greater than 1-for-30, and may determine to effect such Reverse Split promptly after the special meeting if such stockholder approval is received. As set forth in Appendix A, by approval of this Proposal 1, the stockholders will be deemed to have approved a separate amendment to effect the Reverse Split at each of the ratios between and including 1-for-2 and 1-for-30.

Notwithstanding the foregoing, no such amendment or any Reverse Split will occur until the Reverse Split Charter Amendment is filed with the Secretary of State of the State of Delaware and becomes effective. If this Proposal 1 is approved by our stockholders and the board of directors decides to proceed with the Reverse Split, the exact timing of the filing of the Reverse Split Charter Amendment and the Reverse Split will be determined by our board of directors in its sole discretion based on its evaluation as to when such action will be the most advantageous to us and our stockholders, as discussed below. The board of directors will also determine the exact Reverse Split ratio within the Ratio Range, which ratio will be included in a public announcement made prior to the effectiveness of the Reverse Split Charter Amendment. Any amendment to effect the Reverse Split at the other ratios within the Ratio Range adopted and approved by the board of directors and stockholders will be abandoned. We may effect only one reverse stock split in connection with this proposal. We believe enabling the board of directors to fix the specific ratio will provide us with the flexibility to implement the Reverse Split in a manner designed to maximize the anticipated benefits to us and our stockholders. Upon the effectiveness of the Reverse Split Charter Amendment effecting the Reverse Split, or the Split Effective Time, the issued shares of our common stock immediately prior to the Split Effective Time will be reclassified into a smaller number of shares of common stock within the Ratio Range, such that a holder of our common stock will own one share of our common stock for the specified number of shares of common stock held by that stockholder immediately prior to the Split Effective Time, which number will be determined by the board of directors within the Ratio Range in its sole discretion.

Because the Reverse Split will decrease the number of issued shares of our common stock by a ratio within a range of not less than 1-for-2 and not greater than 1-for-30 but would not effect a decrease to the number of authorized shares of our common stock, the Reverse Split Charter Amendment would result in a relative increase to the number of authorized and unissued shares of our common stock.

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

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

In evaluating whether to seek stockholder approval for the Reverse Split, our board of directors also considered potential negative factors associated with reverse stock splits. These factors include the negative perception of reverse stock splits that investors, analysts

and other stock market participants may hold; the fact that the stock prices of some companies that have effected reverse stock splits have subsequently declined, sometimes significantly, following their reverse stock splits; the possible adverse effect on liquidity that a reduced number of outstanding shares of common stock could cause; the costs associated with implementing a reverse stock split; and in our case, the possibility that the Reverse Split may not allow us to demonstrate the ten consecutive days of compliance with Nasdaq's minimum bid price rule prior to the expiration of the current March 30, 2026 deadline to be in compliance. In approving and recommending the Reverse Split, our board of directors determined that any potential negative factors are outweighed by the potential benefits of the Reverse Split.

Reasons for the Reverse Split

Our board of directors approved this Proposal 1 because it believes that:

- seeking stockholder approval of the Reverse Split Charter Amendment to effect the Reverse Split at the discretion of the board of directors is advisable and in the best interests of our company and our stockholders;
- effecting the Reverse Split may avoid a delisting of our common stock from Nasdaq, which would prevent our common stock from trading on the OTC Markets or another quotation medium and potentially improve the marketability and liquidity of our common stock;
- an investment in our common stock may not appeal to brokerage firms that are reluctant to recommend lower priced securities to their clients and 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;
- analysts at many brokerage firms do not monitor the trading activity or otherwise provide coverage of lower priced stocks and most investment funds are reluctant to invest in lower priced stocks; and
- a higher stock price may help generate investor interest in us and help us attract and retain employees.

Nasdaq Requirements for Continued Listing

Our board of directors is seeking authority to effect the Reverse Split with the primary intent of increasing the market price of our common stock to meet the price criteria for continued listing on Nasdaq. Our common stock is listed on the Nasdaq Capital Market under the symbol "XLO."

On April 4, 2025, we received written notification from the Listing Qualifications Department of Nasdaq, or the Nasdaq Staff, that, because the closing bid price for our common stock had fallen below \$1.00 per share for 30 consecutive business days, we no longer complied with the minimum bid price requirement for continued listing on the Nasdaq Global Select Market, pursuant to Nasdaq Listing Rule 5450(a)(1). Pursuant to Nasdaq Listing Rule 5810(c)(3)(A), we had an initial period of 180 calendar days, or until October 1, 2025, to regain compliance with the minimum bid price requirement.

On October 2, 2025, we received a letter from the Nasdaq Staff approving our application to list our common stock on the Nasdaq Capital Market. Our common stock listing was transferred to the Nasdaq Capital Market at the opening of business on October 6, 2025. In connection with the transfer to the Nasdaq Capital Market, Nasdaq granted us an additional 180 calendar day period, or until March 30, 2026, to regain compliance with the minimum bid price requirement under Nasdaq Listing Rule 5550(a)(2). If, at any time before March 30, 2026, the closing bid price for our common stock is at least \$1.00 per share for a minimum of 10 consecutive business days, the Nasdaq Staff will provide written notification to us that we are in compliance with the minimum bid price requirement, unless the Nasdaq Staff exercises its discretion to extend this 10-day period pursuant to the Nasdaq Listing Rules.

If we do not regain compliance with the minimum bid price requirement by March 30, 2026, or if we do not meet the other listing standards, the Nasdaq Staff will provide us with notice that our common stock may be delisted. Upon receipt of such notice, under Nasdaq rules, we may appeal the Nasdaq Staff's delisting determination to a Nasdaq Listing Qualifications Panel, or the Panel. However, there can be no assurance that, if we do appeal the delisting determination by the Nasdaq Staff to the Panel, such appeal would be successful.

In the event we are delisted from Nasdaq, our shares may commence trading on the OTC Markets or another quotation medium. As a result, an investor would likely find it more difficult to trade or obtain accurate price quotations for our shares. Delisting would likely also reduce the visibility, liquidity, and value of our common stock, reduce institutional investor interest in our company, and may increase the volatility of our common stock. Delisting could also cause a loss of confidence of potential industry partners, lenders, and employees, which could further harm our business and our future prospects. Further, a delisting from Nasdaq and continued or further declines in our share price could also greatly impair our ability to raise additional necessary capital through additional financing, or use our shares for business development or other corporate initiatives, and could significantly increase the ownership dilution to

stockholders caused by our issuing equity in financing or other transactions.

We believe that effecting the Reverse Split will help us avoid delisting from Nasdaq and any resulting consequences. Accordingly, we believe that the Reverse Split is our best proactive option for complying with the minimum bid price requirement for continued listing on the Nasdaq Capital Market. A decrease in the number of outstanding shares of our common stock resulting from the Reverse Split should, absent other factors, assist in ensuring that the per share market price of our common stock remains above the requisite price for continued listing. However, we cannot provide any assurance that our minimum bid price would comply with the minimum bid price requirement of the Nasdaq Capital Market following the Reverse Split.

Potential Increased Investor Interest

On January 13, 2026, the closing price of a share of our common stock on the Nasdaq Capital Market was \$0.6558 per share. We believe that the low per share market price of our common stock impairs the marketability of our common stock to, and acceptance by, institutional investors and other members of the investing community and creates a negative impression of our company. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors are reluctant to recommend lower priced securities to their clients or have internal policies and practices that prohibit them from investing in low-priced stocks. 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. Also, our board of directors believes that most investment funds are reluctant to invest in lower priced stocks. The higher share price that may result from the Reverse Split could enable investors and brokerage firms with such policies and practices to invest in our common stock. In addition, these factors may affect our ability to raise additional capital through the sale of our common stock.

Criteria the Board of Directors May Use to Determine to Implement the Reverse Split

If our stockholders adopt and approve the Reverse Split Proposal, our board of directors will be authorized to proceed with the Reverse Split. The exact ratio of the Reverse Split, within a range of 1-for-2 to 1-for-30, would be determined by our board of directors in its sole discretion and publicly announced by us prior to the effective time of the Reverse Split. In determining whether to proceed with the Reverse Split and setting the appropriate ratio for the Reverse Split, if any, our board of directors may consider, among other things, factors such as:

- Nasdaq's minimum price per share requirements and its other listing requirements such as requirements relating to the minimum number of holders;
- the historical market prices and trading volume of our common stock;
- the number of shares of our common stock outstanding prior to and after the Reverse Split;
- the then-prevailing and expected market prices and trading volume of our common stock and the anticipated or actual impact of the Reverse Split (including the reduction in the number of outstanding shares) on the market prices and trading volume for our common stock;
- the number of authorized but unissued shares of our common stock that would result from the Reverse Split;
- the anticipated impact of a particular ratio on our ability to reduce administrative and transactional costs;
- business developments affecting us; and
- prevailing general market and economic conditions.

Certain Risks Associated with the Reverse Split

There are risks associated with the Reverse Split, including that the Reverse Split may not result in an increase in the per share price of our common stock following the Reverse Split or in the future. The history of similar stock split combinations for companies in like circumstances is varied. There is no assurance that:

- the market price per share will either exceed or remain in excess of the \$1.00 minimum bid price as required by Nasdaq for continued listing, or that we will otherwise meet the requirements of Nasdaq for continued listing on Nasdaq;
- the market price per share of our common stock after the Reverse Split will rise in proportion to the reduction in the number of shares of our common stock outstanding before the Reverse Split;

- the Reverse Split will result in a per share price that will attract brokers and investors;
- the Reverse Split will result in a per share price that will increase our ability to attract and retain employees; or
- the market price of our common stock will not decrease in the future.

The market price of our common stock will also be based on the performance of our company and other factors detailed from time to time in the reports we file with the SEC, some of which may be out of our control, including general economic, market and industry conditions. If the Reverse 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.

Furthermore, the liquidity of our common stock may be negatively impacted by the Reverse Split, given the reduced number of shares that would be outstanding after the Reverse Split, particularly if the per-share market price does not increase as a result of the Reverse Split. For instance, if the Reverse Split is implemented, it may result in some stockholders owning “odd lots” (less than 100 shares) of common stock. Odd lot shares may be more difficult to sell, and brokerage commissions and other costs of transactions in odd lots may be higher than the costs of transactions in “round lots” of even multiples of 100 shares. If we effect the Reverse Split, the resulting per-share price may nevertheless fail to attract institutional investors and may not satisfy the investing guidelines of such investors and, consequently, the trading liquidity of our common stock may not improve. Accordingly, the Reverse Split may not achieve the desired result of increasing marketability of our common stock as described above under “*Reasons for the Reverse Split.*”

You should also keep in mind that implementation of the Reverse Split does not have an effect on the actual or intrinsic value of our business or a stockholder’s proportional ownership in our company (subject to the treatment of fractional shares). However, should the overall value of our common stock decline after the proposed Reverse Split, then the actual or intrinsic value of the shares of our common stock held by you will also proportionately decrease as a result of the overall decline in value.

Principal Effects of the Reverse Split

If our stockholders adopt and approve the Reverse Split Proposal and our board of directors elects to implement the Reverse Split, depending on the ratio for the Reverse Split determined by our board of directors, a minimum of every 2 and a maximum of every 30 shares of issued common stock will be combined and reclassified into one new share of common stock.

If implemented, the Reverse Split will have the effect of decreasing the number of shares of our common stock that are issued and outstanding. As of January 2, 2026, there were 67,540,930 shares of common stock issued and outstanding, and no shares of common stock held by us in treasury. The actual number of shares of common stock issued and outstanding after giving effect to the Reverse Split, if implemented, will depend on the ratio for the Reverse Split that is ultimately determined by our board of directors.

The Reverse Split will not change the terms of our common stock. The Reverse Split will have no effect on the number of shares of preferred stock that we are authorized to issue. After the Reverse Split, the shares of common stock and preferred stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to the common stock and preferred stock, respectively, now authorized. The Reverse Split will not change the par value of the common stock or the preferred stock.

Except with respect to the treatment of fractional shares, the Reverse Split will affect all holders of our common stock uniformly and will not affect any stockholder’s percentage ownership interest in our company, except that, as described below under “*Fractional Shares,*” record holders of common stock otherwise entitled to a fractional share as a result of the Reverse Split will receive cash in lieu of such fractional share. In addition, the Reverse Split will not affect any stockholder’s proportionate voting power (subject to the treatment of fractional shares).

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

After the Split Effective Time, our common stock will have a new Committee on Uniform Securities Identification Procedures, or CUSIP, number, which is a number used to identify our equity securities. The Reverse Split is not intended as, and would not have the effect of, a “going private transaction” covered by Rule 13e-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. After the Reverse Split, we will continue to be subject to the periodic reporting and other requirements of the Exchange Act.

Assuming Reverse Split ratios of 1-for-2, 1-for-15 and 1-for-30, which reflect the low, middle and high end of the range that our stockholders are being asked to adopt and approve, the following table sets forth as of January 2, 2026:

- (i) the number of shares of our common stock that would be authorized;
- (ii) the number of shares of our common stock that would be issued and outstanding;
- (iii) the aggregate number of shares of our common stock that would be reserved for issuance upon exercise of outstanding options and restricted stock units, or RSUs, under our equity incentive plans;
- (iv) the aggregate number of shares of our common stock that would be reserved and available for future issuance under our equity incentive plans and our employee stock purchase plan;
- (v) the number of shares of our common stock that would be reserved for sale and issuance pursuant to our “at-the market” offering program; and
- (vi) the number of shares of our common stock that would be reserved for issuance pursuant to the exercise of outstanding warrants, consisting of an aggregate of 124,947,207 prefunded warrants to purchase common stock and 114,886,446 common stock warrants.

The table does not account for fractional shares for which stockholders will be entitled to receive cash in lieu thereof in the Reverse Split.

	Number of Shares Before Reverse Stock Split	Reverse Split Ratio of 1-for-2	Reverse Split Ratio of 1-for-15	Reverse Split Ratio of 1-for-30
Number of Shares of Common Stock Authorized	600,000,000	600,000,000	600,000,000	600,000,000
Number of Shares of Common Stock Issued and Outstanding	67,540,930	33,770,465	4,502,728	2,251,364
Number of Shares of Common Stock Reserved for Issuance Pursuant to Outstanding Options and RSUs Under Our Equity Incentive Plans	39,441,741	19,720,870	2,629,449	1,314,724
Number of Shares of Common Stock Reserved and Available for Future Issuance Under Our Equity Incentive Plans and Our Employee Stock Purchase Plan	7,173,021	3,586,510	478,201	239,100
Number of Shares of Common Stock Reserved for Future Issuance Pursuant to Our “At-the-Market” Offering Program	50,000,000	25,000,000	3,333,333	1,666,666
Number of Shares of Common Stock Reserved for Issuance Pursuant to the Exercise of Prefunded Warrants and Common Stock Warrants	239,833,653	119,916,826	15,988,910	7,994,455

Reservation of Right to Abandon the Reverse Split Charter Amendment

Although we currently intend to effect the Reverse Split to regain compliance with the minimum bid price requirement, notwithstanding stockholder adoption and approval of the Reverse Split, our board of directors has discretion as to whether to effect the Reverse Split Proposal and reserves the right to abandon the Reverse Split Charter Amendment without any further action by our stockholders if at any time prior to the filing or effectiveness of the Reverse Split Charter Amendment, our board of directors determines, in its sole discretion, that the Reverse Split is no longer in the best interests of our company and our stockholders. If we do not file the Reverse Split Charter Amendment with the Secretary of State of the State of Delaware by the one-year anniversary of the date on which the Reverse Split is adopted and approved by our stockholders at the special meeting, our board of directors will be deemed to have abandoned the Reverse Split for each of the stockholder-approved ratios.

By voting in favor of the Reverse Split Charter Amendment, stockholders are also expressly authorizing our board of directors to determine not to proceed with, or abandon, the Reverse Split if it should so decide. Additionally, if our board of directors determines to effect the Reverse Split, the Reverse Split Charter Amendment setting forth the ratio approved by the board of directors will be filed with the Secretary of State of the State of Delaware and any amendment to effect the Reverse Split at any of the other stockholder-approved ratios will be abandoned.

Authorized Shares of Common Stock

We are currently authorized under our Restated Certificate of Incorporation, as amended, to issue up to a total of 605,000,000 shares

of capital stock, consisting of 600,000,000 shares of common stock and 5,000,000 shares of preferred stock. The Reverse Split will not result in a reduction in the total number of shares of capital stock that we are authorized to issue. Stockholders will own fewer shares of common stock as a result of the Reverse Split. Because the Reverse Split will decrease the number of outstanding shares of common stock, the Reverse Split Charter Amendment will result in a relative increase in the number of authorized and unissued shares of our common stock.

Procedure for Effecting the Reverse Split and Exchange of Stock Certificates

If our stockholders adopt and approve the Reverse Split Charter Amendment, and if our board of directors still believes that a reverse stock split is in the best interests of our company and elects to implement the Reverse Split (with the ratio to be determined in the discretion of our board of directors within the parameters described in this proxy statement), we will file the Reverse Split Charter Amendment with the Secretary of State of the State of Delaware at such time as our board of directors has determined to be appropriate and any amendment to effect the Reverse Split at any of the other stockholder-approved ratios will be abandoned; provided that in no event shall the filing of the Reverse Split Charter Amendment occur after the one-year anniversary of the date on which the Reverse Split is adopted and approved by our stockholders at the special meeting. Our board of directors may delay effecting the Reverse Split without resoliciting stockholder adoption and approval thereof.

Our registered holders of common stock hold all of their shares electronically in book-entry form with our transfer agent, Computershare Trust Company, N.A. These stockholders are provided with a periodic statement reflecting the number of shares of common stock registered in their accounts. Stockholders who hold shares of our common stock electronically in book-entry form with our transfer agent will not need to take further action and any periodic statement provided to such stockholders after the Split Effective Time will reflect the appropriate number of whole shares of post-Reverse Split common stock resulting from the Reverse Split.

If our board of directors elects to implement the Reverse Split, then, for purposes of implementing the Reverse Split, we intend to treat stockholders holding our common stock in “street name,” through a bank, broker or other nominee or custodian in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers, or other nominees or custodians will be instructed to effect the Reverse Split for their beneficial holders holding our common stock in street name. However, these banks, brokers, or other nominees or custodians may have different procedures than registered stockholders for processing the Reverse Split. Stockholders who hold shares of our common stock with a bank, broker, or other nominee or custodian and who have any questions in this regard are encouraged to contact their bank, broker, or other nominee or custodian.

Fractional Shares

If our board of directors elects to implement the Reverse Split, fractional shares will not be issued. Stockholders of record who would otherwise hold fractional shares of our common stock as a result of the Reverse Split will be entitled to receive a cash payment (without interest and subject to applicable withholding taxes) in lieu of such fractional shares. Each such stockholder will be entitled to receive a cash payment (without interest) equal to the fraction of a share of common stock to which such stockholder would otherwise be entitled multiplied by (i) the closing price per share of the common stock on the Nasdaq Capital Market at the close of business on the trading day preceding the date of the Split Effective Time multiplied by (ii) the Reverse Stock Split Number (as defined in the Reverse Split Charter Amendment attached hereto as Appendix A).

Stockholders should be aware that, under the escheat laws of the various jurisdictions where stockholders reside, where we are domiciled and where the funds will be deposited, sums due for fractional interests resulting from the Reverse Split that are not timely claimed after the Split Effective Time in accordance with applicable law 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 of the Reverse Split on Employee Plans, Stock Options and RSUs

Pursuant to the various instruments governing our then-outstanding stock options and RSUs, in connection with the Reverse Split, our board of directors will reduce the number of shares of common stock issuable upon the exercise or vesting of such stock options and RSUs in proportion to the ratio of the Reverse Split and proportionately increase the exercise price of our outstanding stock options. In connection with such proportionate adjustments, the number of shares of common stock issuable upon exercise or vesting of outstanding stock options and RSUs will be rounded down to the nearest whole share, and the exercise prices of outstanding stock options will be rounded up to the nearest cent. In addition, as of the Split Effective Time, we would adjust and proportionately decrease the total number of shares of our common stock that may be the subject of the future grants under our employee plans.

Effect of the Reverse Split on Outstanding Warrants

As of January 2, 2026, we had an aggregate 239,833,653 warrants to purchase common stock outstanding, consisting of 124,947,207 prefunded warrants to purchase common stock and 114,886,446 common stock warrants. Under the terms of the warrants, the Reverse Split would result in a proportionate decrease in the number of shares of common stock issuable upon the exercise of all then-outstanding warrants and a proportionate increase in the per share exercise price of all then-outstanding warrants. This would result in approximately the same aggregate price being required to be paid under such warrants upon exercise and approximately the same value of shares of common stock being delivered upon such exercise immediately following the Reverse Split as was the case immediately preceding the Reverse Split. In addition, as of the Split Effective Time, we would adjust and proportionately decrease the total number of shares of our common stock reserved for issuance pursuant to then-outstanding warrants.

No Appraisal Rights

Stockholders do not have the right to dissent and obtain appraisal of, or payment for, such stockholder's capital stock under the Delaware General Corporation Law, our Restated Certificate of Incorporation, as amended, or our bylaws in connection with the Reverse Split.

Anti-Takeover Effects

An additional effect of the Reverse Split would be to increase the relative amount of authorized but unissued shares of our common stock, which may, under certain circumstances, be construed as having an anti-takeover effect. Although not intended for such purposes, the effect of the increase in available shares could be to render more difficult or discourage an attempt to take over or otherwise obtain control of the company (for example, by permitting issuances that would dilute the stock ownership of a person or entity seeking to effect a change in the composition of our board of directors or contemplating a tender offer or other change in control transaction). Our board of directors is not presently aware of any attempt to acquire control of our company, and the Reverse Split Proposal is not part of any plan by our board of directors to recommend or implement a series of anti-takeover measures.

Accounting Matters

As of the Split Effective Time, the stated capital on our balance sheet attributable to our common stock would be reduced proportionately based on the selected exchange ratio, and the additional paid-in capital account would be credited with the amount by which the stated capital is reduced. In financial statements filed after the Split Effective Time, we would retroactively adjust net income or loss per share and other share and per share amounts for periods ending before the Reverse Split to give effect to the Reverse Split. The per share net income or loss or net book value of our common stock would be increased because there would be fewer shares of our common stock outstanding.

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

The following discussion is a summary of the material U.S. federal income tax consequences of the proposed Reverse Split to U.S. Holders (as defined below). This discussion is based on the Internal Revenue Code of 1986, as amended, or the Code, U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in each case in effect as of the date of this proxy statement. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a U.S. Holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed Reverse Split.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of our common stock that, for U.S. federal income tax purposes, is or is treated as:

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

This discussion is limited to U.S. Holders who hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to the particular circumstances of a U.S. Holder, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to U.S. Holders that are subject to special rules, including, without limitation:

- Financial institutions;
- Insurance companies;
- Real estate investment trusts;
- Regulated investment companies;
- Grantor trusts;
- Tax-exempt organizations;
- Dealers or traders in securities, commodities or currencies;
- Stockholders who hold common stock as part of a position in a straddle or as part of a hedging, conversion or integrated transaction for U.S. federal income tax purposes or U.S. holders that have a functional currency other than the U.S. dollar; or
- Stockholders who actually or constructively own 10% or more of our voting stock.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is the beneficial owner of our common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner and the activities of the partnership. Accordingly, partnerships (and other entities treated as partnerships for U.S. federal income tax purposes) holding our common stock and the partners in such entities should consult their own tax advisors regarding the U.S. federal income tax consequences of the proposed Reverse Split to them.

In addition, the following discussion does not address the U.S. federal estate and gift tax, alternative minimum tax, or state, local and non-U.S. tax law consequences of the proposed Reverse Split. Furthermore, the following discussion does not address any tax consequences of transactions effectuated before, after or at the same time as the proposed Reverse Split, whether or not they are in connection with the proposed Reverse Split.

STOCKHOLDERS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PROPOSED REVERSE SPLIT ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

The proposed Reverse Split is intended to be treated as a “recapitalization” for U.S. federal income tax purposes pursuant to Section 368(a)(1)(E) of the Code. As a result, a U.S. Holder generally should not recognize gain or loss upon the proposed Reverse Split for U.S. federal income tax purposes, except with respect to cash received in lieu of a fractional share of our common stock, as discussed below. A U.S. Holder’s aggregate adjusted tax basis in the shares of our common stock received pursuant to the proposed Reverse Split should equal the aggregate adjusted tax basis of the shares of our common stock surrendered (reduced by the amount of such basis that is allocated to any fractional share of our common stock for which the U.S. Holder receives cash). The U.S. Holder’s holding period in the shares of our common stock received pursuant to the proposed Reverse Split should include the holding period in the shares of our common stock surrendered. U.S. Treasury regulations provide detailed rules for allocating the tax basis and holding period of shares of common stock surrendered in a recapitalization to shares received in the recapitalization. U.S. Holders of shares of our common stock acquired on different dates and at different prices should consult their tax advisors regarding the allocation of the tax basis and holding period of such shares.

A U.S. Holder that, pursuant to the proposed Reverse Split, receives cash in lieu of a fractional share of our common stock should recognize capital gain or loss in an amount equal to the difference, if any, between the amount of cash received and the portion of the U.S. Holder’s aggregate adjusted tax basis in the shares of our common stock surrendered that is allocated to such fractional share. Such capital gain or loss will be short term if the pre-Reverse Split shares were held for one year or less at the effective time of the Reverse Split and long term if held for more than one year.

Payments of cash made in lieu of a fractional share of our common stock may, under certain circumstances, be subject to information reporting and backup withholding. To avoid backup withholding, each U.S. Holder that does not otherwise establish an exemption should furnish its taxpayer identification number and comply with the applicable certification procedures.

Backup withholding is not an additional tax and amounts withheld will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle such holder to a refund, provided the required information is timely furnished to the IRS. U.S. Holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

THE BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE "FOR" THIS PROPOSAL 1 TO APPROVE AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED, TO EFFECT A REVERSE STOCK SPLIT.

PROPOSAL 2 - ADJOURNMENT PROPOSAL

Our board of directors believes that if the number of votes cast at the special meeting is insufficient to approve Proposal 1, it is in the best interests of the stockholders to enable our board of directors to continue to seek to obtain a sufficient number of additional votes to approve Proposal 1.

In this Proposal 2, we are asking stockholders to authorize the holder of any proxy solicited by our board of directors to vote in favor of adjourning or postponing the special meeting or any adjournment or postponement thereof. If our stockholders approve this Proposal 2, we could adjourn or postpone the special meeting, and any adjourned session of the special meeting, to use the additional time to solicit additional proxies in favor of Proposal 1.

Additionally, approval of this Proposal 2 could mean that, in the event we receive proxies indicating that a majority in voting power of the votes to be cast by holders of our common stock will vote against Proposal 1, we could adjourn or postpone the special meeting without a vote on Proposal 1 and use the additional time to solicit the holders of those shares to change their vote in favor of Proposal 1.

OUR BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE “*FOR*” THIS PROPOSAL 2 FOR APPROVAL OF AN ADJOURNMENT OF THE SPECIAL MEETING TO A LATER DATE OR DATES, IF NECESSARY OR APPROPRIATE, TO PERMIT FURTHER SOLICITATION AND VOTE OF PROXIES.

STOCK OWNERSHIP AND REPORTING

Security Ownership of Certain Beneficial Owners and Management

Unless otherwise provided below, the following table sets forth information with respect to the beneficial ownership of our common stock as of January 2, 2026 by:

- each person, entity, or group of affiliated persons or entities, who is known to us to be the beneficial owner of 5% or more of the outstanding shares of our common stock;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to stock options or warrants that are currently exercisable or exercisable within 60 days after January 2, 2026 are considered outstanding and beneficially owned by the person or entity holding the stock options or warrants for the purpose of calculating the percentage ownership of that person or entity but not for the purpose of calculating the percentage ownership of any other person or entity. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable.

The column entitled “Percentage of Shares Beneficially Owned (%)” is based on a total of 67,540,930 shares of our common stock outstanding as of January 2, 2026. Except as otherwise set forth below, the address of the beneficial owner is c/o Xilio Therapeutics, Inc., 828 Winter Street, Suite 300, Waltham, Massachusetts 02451. Beneficial ownership representing less than one percent of our outstanding common stock is denoted with an “*.”

Name of Beneficial Owner	Number of Shares Owned	Right to Acquire ⁽¹⁾	Total Shares Owned plus Right to Acquire	Percentage of Shares Beneficially Owned (%)
5 % Stockholders				
Gilead Sciences, Inc. ⁽²⁾	9,105,451	5,412,227	14,517,678	19.90%
GKCC, LLC ⁽³⁾	7,000,000	—	7,000,000	10.36%
Entities affiliated with Bain Capital Life Sciences Investors, LLC ⁽⁴⁾	2,805,413	4,379,431	7,184,844	9.99%
Coastlands Capital Partners LP ⁽⁵⁾	5,346,069	1,556,794	6,902,863	9.99%
Associates of Frazier Life Sciences Management, L.P. ⁽⁶⁾	5,915,091	924,617	6,839,708	9.99%
Logos Capital Management ⁽⁷⁾	—	7,496,210	7,496,210	9.99%
Affiliates of Point72 Associates, LLC ⁽⁸⁾	4,000,000	3,052,260	7,052,260	9.99%
StemPoint Capital ⁽⁹⁾	2,000,000	4,000,000	6,000,000	8.39%
AbbVie, Inc. ⁽¹⁰⁾	4,347,826	—	4,347,826	6.44%
Named Executive Officers and Directors				
René Russo, Pharm.D.	325,422	3,534,304	3,859,726	5.43%
Christopher Frankenfield	24,766	1,313,661	1,338,427	1.94%
Katarina Luptakova, M.D.	33,250	497,156	530,406	*
Akintunde Bello, Ph.D.	—	—	—	*
Sara M. Bonstein	—	104,613	104,613	*
Aoife Brennan, M.D.	—	16,666	16,666	*
Paul J. Clancy	—	219,095	219,095	*
Daniel Curran, M.D.	—	25,000	25,000	*
Robert Ross, M.D.	—	64,600	64,600	*
Christina Rossi	—	104,613	104,613	*
James Shannon, M.D.	70,000	16,666	86,666	*
Yuan Xu, Ph.D.	—	77,800	77,800	*
All executive officers and directors as a group (13 persons) ⁽¹¹⁾	459,809	6,144,659	6,604,468	8.96%

- (1) Consists of shares of our common stock that may be acquired upon the exercise of stock options and prefunded warrants to purchase shares of our common stock, in each case, that are exercisable on or within 60 days of January 2, 2026.
- (2) Based on a Schedule 13G/A filed by Gilead Sciences, Inc., or Gilead, on August 14, 2025, reporting beneficial ownership as of June 30, 2025 and our warrant records. Consists of (a) 9,105,451 shares of common stock and (b) 5,412,227 shares of common stock underlying prefunded warrants exercisable within 60 days of January 2, 2026. Excludes 31,233,039 shares of common stock underlying prefunded

- warrants and Series A warrants held by Gilead exercisable within 60 days of January 2, 2026. The prefunded warrants and Series A warrants may not be exercised to the extent that Gilead would beneficially own more than 19.9% of our shares of outstanding common stock after giving effect to such exercise. The address for Gilead is 333 Lakeside Drive, Foster City, California 94404.
- (3) Based solely on a Schedule 13G filed by GKCC, LLC, on September 27, 2024, reporting beneficial ownership as of June 7, 2024. Consists of shares of common stock held by GKCC, LLC and beneficially owned by GKCC, LLC and Yekaterina Chudnovsky, who is the sole member and manager of GKCC, LLC. Each of GKCC, LLC and Yekaterina Chudnovsky has sole voting and dispositive power over the shares of common stock. The address for GKCC, LLC and Yekaterina Chudnovsky is 501 Silverside Road, Suite 87AVA, Wilmington, DE 19809.
- (4) Based solely on a Schedule 13G/A filed by Bain Capital Life Sciences Fund II, L.P., on November 14, 2024, reporting beneficial ownership as of September 30, 2024. Consists of (i) 1,348,682 shares of common stock held by Bain Capital Life Sciences Fund II, L.P., or BCLS II, (ii) 1,292,469 shares of common stock held by BCLS II Investco, LP, or BCLS II Investco, (iii) 164,262 shares of common stock held by BCIP Life Sciences Associates, LP, or BCIPLS, and, together with BCLS II and BCLS II Investco, the Bain Capital Life Sciences Entities and (iv) prefunded warrants to purchase up to 4,379,431 shares of common stock held by BCLS II Equity Opportunities, LP, or BCLS II Equity, and excludes prefunded warrants to purchase an additional 11,248,010 shares of common stock. The prefunded warrants may not be exercised to the extent that the holder (together with its affiliates) would beneficially own more than 9.99% of our shares of outstanding common stock after giving effect to such exercise. BCLS II has shared voting and dispositive power over all shares held by the Bain Capital Life Science Entities, and each of the other Bain Life Sciences Entities shares voting and dispositive power over the shares it holds with BCLS II. The address of Bain Capital Life Sciences Entities is c/o Bain Capital Life Sciences, LP, 200 Clarendon Street, Boston, MA 02116.
- (5) Based on a Schedule 13G filed by Coastlands Capital LP on December 11, 2025, reporting beneficial ownership as of December 4, 2025 and our warrant records. Consists of 5,346,069 shares of common stock and 1,556,794 shares of common stock underlying prefunded warrants and Series A warrants that are exercisable within 60 days of January 2, 2026. Excludes prefunded warrants and Series A warrants to purchase an additional 25,113,206 shares of common stock that are exercisable within 60 days of January 2, 2026 because such warrants may not be exercised to the extent the reporting person would beneficially own more than 9.99% of our shares of outstanding common stock after giving effect to such exercise. The address for the reporting person is 601 California Street, Suite 1210, San Francisco, CA 94108.
- (6) Based on a Schedule 13G/A filed by certain persons and entities associated with Frazier Life Sciences Management, L.P., or Frazier, reporting beneficial ownership as of June 30, 2025 and our warrant records. Consists of 5,915,091 shares of common stock and 924,717 shares of common stock underlying prefunded warrants held by Frazier exercisable within 60 days of January 2, 2026. Excludes prefunded warrants and Series A warrants to purchase an additional 25,745,383 shares of common stock exercisable by Frazier within 60 days of January 2, 2026 because such warrants may not be exercised to the extent that Frazier would beneficially own more than 9.99% of our shares of outstanding common stock after giving effect to such exercise. The address for Frazier is c/o Frazier Life Sciences Management, L.P., 1001 Page Mill Rd, Building 4, Suite B, Palo Alto, CA 94304.
- (7) Based solely upon our records. Consists of 7,496,210 shares of common stock underlying prefunded warrants and Series A warrants held by Logos Opportunities Fund IV LP, or Logos Capital, exercisable within 60 days of January 2, 2026. Excludes prefunded warrants and Series A warrants to purchase an additional 5,838,790 shares of common stock exercisable by Logos within 60 days of January 2, 2026 because such warrants may not be exercised to the extent that Logos would beneficially own more than 9.99% of our shares of outstanding common stock after giving effect to such exercise.
- (8) Based on a Schedule 13G/A filed by affiliates of Point72 Associates, LLC on November 14, 2025, reporting beneficial ownership as of September 30, 2025 and our warrant records. Consists of 4,000,000 shares of common stock and 3,052,260 shares of common stock underlying prefunded warrants and Series A warrants that are exercisable within 60 days of January 2, 2026. Excludes prefunded warrants and Series A warrants to purchase an additional 4,947,740 shares of common stock that are exercisable within 60 days of January 2, 2026 because such warrants may not be exercised to the extent that reporting persons would beneficially own more than 9.99% of our shares of outstanding common stock after giving effect to such exercise. The address for the reporting persons is 72 Cummings Point Road, Stamford, CT 06902.
- (9) Based solely upon our warrant records. Consists of 2,000,000 shares of common stock and 4,000,000 shares of common stock underlying prefunded warrants and Series A warrants held by StemPoint Capital Master Fund LP exercisable within 60 days of January 2, 2026.
- (10) Based solely on a Schedule 13G filed by AbbVie Inc., or AbbVie, on February 18, 2025, reporting beneficial ownership as of February 11, 2025. Consists of shares of common stock held by and beneficially owned by AbbVie. AbbVie has sole voting and dispositive power over the shares of common stock. The address of AbbVie is 1 North Waukegan Road, North Chicago, Illinois, 60064-6400.
- (11) Consists of (a) 459,809 shares of common stock and (b) 6,144,659 shares of common stock underlying stock options exercisable within 60 days of January 2, 2026.

STOCKHOLDERS SHARING THE SAME ADDRESS

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our proxy materials, including the notice of internet availability of proxy materials and proxy statement, may have been sent to multiple stockholders in your household, unless you have requested otherwise. We will promptly deliver a separate copy of any of the above documents to you if you write or call us at Xilio Therapeutics, Inc., 828 Winter Street, Suite 300, Waltham, Massachusetts 02451, Attention: Corporate Secretary, telephone: (857) 524-2466, e-mail:

investors@xiliotx.com. If you would like to receive separate copies of the notice of internet availability of proxy materials and proxy statement in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address, phone number or e-mail.

STOCKHOLDER PROPOSALS FOR OUR 2026 ANNUAL MEETING

As previously discussed in our proxy statement filed with the SEC on April 28, 2025, a stockholder who would like to have a proposal considered for inclusion in our proxy statement for the 2026 annual meeting of stockholders must have submitted the proposal in accordance with the procedures outlined in Rule 14a-8 of the Exchange Act so that it was received by us no later than December 29, 2025. However, if the date of the 2026 annual meeting of stockholders is changed by more than 30 days from the first anniversary of the previous year’s meeting, then the deadline is a reasonable time before we begin to print and send our proxy statement for the 2026 annual meeting of stockholders. SEC rules set standards for eligibility and specify the types of stockholder proposals that may be excluded from a proxy statement. Stockholder proposals should be addressed to Xilio Therapeutics, Inc., 828 Winter Street, Suite 300, Waltham, Massachusetts 02451, Attention: Corporate Secretary.

If a stockholder wishes to propose a nominee for election to our board of directors or present a proposal at an annual meeting but does not wish to have the proposal considered for inclusion in our proxy statement, the nominating stockholder must comply with the advance notice procedure set forth in our bylaws and the additional requirements and procedures outlined in Rule 14a-19 of the Exchange Act. Stockholders at an annual meeting may only consider proposals or nominations (i) specified in the notice of meeting or (ii) brought before the meeting (a) by or at the direction of the board of directors or (b) by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has complied with the procedures in our bylaws and timely delivered to our corporate secretary notice in proper form of the stockholder’s intention to bring such business before the meeting.

The required notice must be in writing and received by our corporate secretary at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year’s annual meeting. Therefore, for stockholder proposals to be brought before the 2026 annual meeting of stockholders, the required notice must be received by our corporate secretary at our principal executive offices no earlier than February 10, 2026 and no later than March 12, 2026. However, in the event that the date of the 2026 annual meeting is advanced by more than 30 days, or delayed by more than 60 days, from the first anniversary of the preceding year’s annual meeting, a stockholder’s notice must be so received no earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of (A) the 90th day prior to such annual meeting and (B) the tenth day following the day on which notice of the date of such annual meeting was mailed or public disclosure of the date of such annual meeting was made, whichever first occurs.

In addition to satisfying the foregoing requirements, to comply with the SEC’s universal proxy rule, stockholders who intend to solicit proxies in support of director nominees other than the company’s nominees in compliance with Rule 14a-19 under the Exchange Act must comply with the additional requirements of Rule 14a-19(b), including providing notice of such proxy solicitation. Such notice must be provided by no later than March 12, 2026; however, if the date of our 2026 annual meeting of stockholders changes by more than 30 calendar days from the first anniversary of our 2025 annual meeting of stockholders, then such notice must be provided by the later of 60 calendar days prior to the date of the 2026 annual meeting of stockholders or the 10th calendar day following our public announcement of the date of the 2026 annual meeting of stockholders.

OTHER MATTERS

As of the date of this proxy statement, we do not know of any other matters to be brought before the special meeting. However, if any other matters not mentioned in this proxy statement are properly brought before the meeting, the individuals named in the proxy intend to use their discretionary voting authority under the proxy to vote the proxy in accordance with their best judgment on those matters.

APPENDIX A
CERTIFICATE OF AMENDMENT OF
RESTATED CERTIFICATE OF INCORPORATION
OF XILIO THERAPEUTICS, INC.

(Pursuant to Section 242 of the
General Corporation Law of the State of Delaware)

Xilio Therapeutics, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware, does hereby certify as follows:

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

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

"FOURTH: The total number of shares of all classes of stock that the Corporation shall have authority to issue is 605,000,000 shares, consisting of (i) 600,000,000 shares of common stock, \$0.0001 par value per share ("Common Stock"), and (ii) 5,000,000 shares of Preferred Stock, \$0.0001 par value per share ("Preferred Stock").

Effective upon the effective time (the "Effective Time") of this Certificate of Amendment (the "Certificate of Amendment") to the Restated Certificate of Incorporation, a one-for-[]¹ reverse stock split of the Common Stock shall become effective, pursuant to which each []¹ (the "Reverse Stock Split Number") shares of Common Stock issued and outstanding and held of record by each stockholder of the Corporation or issued and held by the Corporation in treasury immediately prior to the Effective Time shall be reclassified and combined into one (1) validly issued, fully paid and nonassessable share of Common Stock automatically and without any action by the holder thereof 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 \$0.0001 par value per share. No fractional shares of Common Stock shall be issued as a result of or in connection with the Reverse Stock Split. Stockholders of record who otherwise would be entitled to receive 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 (without interest) in lieu of such fractional share equal to the fraction of a share of Common Stock to which such holder would otherwise be entitled multiplied by (i) the closing price per share of the Common Stock on the Nasdaq Capital Market at the close of business on the trading day preceding the date of the Effective Time multiplied by (ii) the Reverse Stock Split Number.

Each stock certificate or book entry position that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares formerly represented by such certificate or book entry position have been reclassified as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time; provided, however, that each stockholder of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new book entry position evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been reclassified."

SECOND: This Certificate of Amendment shall be effective at _: __ __., Eastern Time, on _____, 202_.

¹ Shall be a number equal to or greater than two (2) and equal to or less than thirty (30) and shall include not more than four decimal digits (it being understood that any number within such range shall, together with the remaining provisions of this Certificate of Amendment not appearing in brackets, constitute a separate amendment being approved and adopted by the Board of Directors and stockholders in accordance with Section 242 of the DGCL with each such form of the Certificate of Amendment (other than the Certificate of Amendment, if any, that is filed with the Secretary of State of the State of Delaware) to be abandoned immediately prior to the filing of the Certificate of Amendment).

IN WITNESS WHEREOF, this Certificate of Amendment has been executed by a duly authorized officer of the Corporation on this ____ day of _____, 202_.

Xilio Therapeutics, Inc.

By: _____
René Russo
Title: President and Chief Executive Officer

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting:

The Notice of Meeting and the Proxy Statement are available at www.proxyvote.com.

V82698-S28531

**XILIO THERAPEUTICS, INC.
Special Meeting of Stockholders
February 23, 2026 11:00 AM ET
This proxy is solicited by the Board of Directors**

The stockholder(s) hereby appoint(s) René Russo and Caroline Hensley, or each of them, as proxies, each with the power to appoint her 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 Xilio Therapeutics, Inc. that the stockholder(s) is/are entitled to vote at the Special Meeting of Stockholders to be held at 11:00 AM ET on February 23, 2026, via a live webcast at www.virtualshareholdermeeting.com/XLO2026SM, 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.

Continued and to be signed on reverse side

