

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

**Molecular Templates, Inc.**  
(Name of Registrant as Specified In Its Charter)

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

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

No fee required

Fee paid previously with preliminary materials

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

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# Molecular Templates, Inc.

**Preliminary Proxy Statement and  
Notice of Special Meeting of Stockholders  
to be held on \_\_\_\_\_, 2023**





June 30, 2023



**To Our Stockholders:**

You are cordially invited to attend a special meeting of stockholders of Molecular Templates, Inc. to be held at Eastern Time on , 2023 in a virtual meeting format. In order to attend, you must register prior to the deadline of , 2023 at Eastern Time at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023). Upon completing your registration, you will receive further instructions via email, including your unique links that will allow you access to the special meeting and will permit you to submit questions. You will not be able to attend the special meeting in person. Additional details regarding the meeting, the business to be conducted at the meeting, and information about Molecular Templates, Inc. that you should consider when you vote your shares are described in this proxy statement.

At the special meeting, we will ask stockholders to approve:

1. an amendment to our amended and restated certificate of incorporation, as amended to effect a reverse stock split at a ratio of not less than 1-for-4 and not greater than 1-for-25, with the exact ratio to be set within that range at the discretion of our Board of Directors (the "Reverse Split"); and
2. the adjournment of the special meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt the Reverse Split proposal.

The Board of Directors recommends the approval of each of these proposals as set forth in this proxy statement. Such other business will be transacted as may properly come before the special meeting.

We hope you will be able to attend the special meeting. Whether or not you plan to attend the special meeting, it is important that you cast your vote either at the time of the meeting or by proxy. You may vote over the Internet as well as by telephone or by mail. When you have finished reading this proxy statement, you are urged to vote in accordance with the instructions set forth in this proxy statement. We encourage you to vote promptly by proxy so that your shares will be represented and voted at the virtual meeting, whether or not you can attend.

Thank you for your continued support of Molecular Templates, Inc. We look forward to seeing you at the special meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Poma", written over a light blue horizontal line.

**Eric E. Poma, Ph.D.**  
*Chief Executive Officer and Chief Scientific Officer*





MOLECULAR TEMPLATES, INC.  
9301 Amberglen Blvd., Suite 100  
Austin, TX 78729  
(512) 869-1555

June 30, 2023

## Notice of Special Meeting of Stockholders

**TIME:** Eastern Time

**DATE:** , 2023

**PLACE:** Special meeting to be held live via the Internet – please visit [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) for more details\*

### PURPOSES:

1. To approve an amendment to our amended and restated certificate of incorporation, as amended, to effect a reverse stock split at a ratio of not less than 1-for-4 and not greater than 1-for-25, with the exact ratio to be set within that range at the discretion of our Board of Directors without further approval or authorization of our stockholders and with our Board of Directors able to elect to abandon such proposed amendment and not effect the reverse stock split authorized by stockholders, in its sole discretion (the "Reverse Split");
2. To approve the adjournment of the special meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt the Reverse Split proposal; and
3. To transact any such other business that may properly come before the special meeting or any adjournment or postponement thereof.

\* This special meeting will be held virtually via live audio webcast on the Internet, with no physical in-person meeting. In order to attend, you must register prior to the deadline of , 2023 at Eastern Time at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) and enter the control number included in the proxy card that you receive. Upon completing your registration, you will receive further instructions via email, including your unique links that will allow you access to the special meeting and will permit you to submit questions.

### WHO MAY VOTE:

You may vote if you were the record owner of Molecular Templates, Inc. common stock at the close of business on , 2023.

A list of stockholders of record will be available virtually during the special meeting and, during the 10 days prior to the special meeting, at our principal executive offices located at 9301 Amberglen Blvd., Suite 100, Austin, TX 78729.

All stockholders are cordially invited to attend the special meeting virtually via the Internet. To participate in the special meeting virtually via the Internet, please visit [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023). In order to attend, you must register in advance at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) prior to the deadline of , 2023 at Eastern Time. Upon completing your registration, you will receive further instructions via email, including your unique links that will allow you access to the meeting and to submit questions during the meeting. You will not be able to attend the special meeting in person. **Whether you plan to attend the special meeting virtually or not, we urge you to vote and submit your proxy by the Internet, telephone or mail in order to ensure the presence of a quorum.** You may change or revoke your proxy at any time before it is voted at the special meeting. If you participate in and vote your shares at the special meeting, your proxy will not be used.

BY ORDER OF THE BOARD OF DIRECTORS

**Megan C. Filoon**  
General Counsel and Secretary

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MOLECULAR TEMPLATES, INC.  
9301 Amberglen Blvd., Suite 100  
Austin, Texas 78729  
(512) 869-1555

## Proxy Statement for Molecular Templates, Inc. Special Meeting of Stockholders to be Held on \_\_\_\_\_, 2023

This proxy statement, along with the accompanying Notice of Special Meeting of Stockholders (the "Notice"), contains information about the special meeting of stockholders of Molecular Templates, Inc., including any adjournments or postponements of the special meeting. We are holding the special meeting at \_\_\_\_\_ Eastern Time on \_\_\_\_\_, 2023 in a virtual format only.

We have determined that the special meeting will be held virtually via live audio webcast on the Internet, with no physical in-person meeting. You will be able to attend and participate in the special meeting online by visiting [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023). In order to attend, you must register in advance at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) prior to the deadline of \_\_\_\_\_, 2023 at \_\_\_\_\_ Eastern Time and enter the control number included in the proxy card that you receive. Upon completing your registration, you will receive further instructions via email, including your unique links that will allow you access to the meeting and will permit you to submit questions.

In this proxy statement, we refer to Molecular Templates, Inc. as "MTEM," "the Company," "we" and "us."

This proxy statement relates to the solicitation of proxies by our Board of Directors (the "Board" or the "Board of Directors") for use at the special meeting.

On or about \_\_\_\_\_, 2023, will begin sending this proxy statement, the attached Notice and the enclosed proxy card to all stockholders entitled to vote at the special meeting.

# Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be Held on \_\_\_\_\_, 2023 at Eastern Time

This proxy statement, the Notice and our form of proxy card are available electronically for viewing, printing and downloading at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023). To view these materials, please have your control number(s) available that appears on your proxy card.

## Important Information About the Special Meeting and Voting

### *Why is the Company Soliciting My Proxy?*

The Board is soliciting your proxy to vote at the special meeting of stockholders to be held in a virtual meeting format on \_\_\_\_\_, 2023, at Eastern Time and any adjournments of the meeting, which we refer to as the special meeting. This proxy statement, along with the accompanying Notice, summarizes the purposes of the meeting and the information you need to know to vote at the special meeting.

We have sent you this proxy statement, the Notice and the proxy card because you owned shares of our common stock on the record date. We intend to commence distribution of the proxy materials to stockholders on or about July 10, 2023.

### *How Do I Attend the Special Meeting?*

We have determined that the special meeting will be held in a virtual meeting format only, with no physical in-person meeting. The special meeting will be held via live audio webcast on the Internet on \_\_\_\_\_, 2023, starting at \_\_\_\_\_ Eastern Time. We have designed our virtual format to enhance, rather than constrain stockholder access, participation and communication. Stockholders may attend the special meeting by registering at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023). Stockholders may vote and submit questions while connected to the special meeting. You need not attend the special meeting in order to vote.

In order to attend the special meeting, you must register in advance at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) prior to the deadline of \_\_\_\_\_, 2023 at \_\_\_\_\_ Eastern Time. Upon completing your registration, you will receive further instructions via email, including your unique link that will allow you to access the special meeting, vote online during the special meeting and will permit you to submit questions during the special meeting. You will also be permitted to submit questions at the time of registration. You may ask questions that are confined to matters properly presented at the special meeting and of general Company concern.

The special meeting will begin promptly at \_\_\_\_\_ Eastern Time. We encourage you to access the special meeting prior to the start time. Online access will open approximately at \_\_\_\_\_ Eastern Time, and you should allow ample time to log in to the meeting and test your computer audio system. We recommend that you carefully review the procedures needed to gain admission in advance.

### *What Happens if There Are Technical Difficulties during the Special Meeting?*

We will have technicians ready to assist you with any technical difficulties you may have accessing the virtual special meeting, voting at the special meeting or submitting questions at the special meeting. If you encounter any difficulties accessing the virtual special meeting during the check-in or meeting time, please call the technical support number 1-866-612-8937 or e-mail [virtualmeeting@viewproxy.com](mailto:virtualmeeting@viewproxy.com).

### *Who May Vote?*

Only stockholders of record at the close of business on \_\_\_\_\_, 2023 are entitled to vote at the special meeting. On this record date, there were \_\_\_\_\_ shares of our common stock outstanding and entitled to vote. Our common stock is our only class of voting stock. Our Series A Convertible Preferred Stock does not have any voting rights.

If on \_\_\_\_\_, 2023 your shares of our common stock were registered directly in your name with our transfer agent, Computershare Trust Company, N.A., then you are a stockholder of record.

If on \_\_\_\_\_, 2023 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the special meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account. You are also invited to attend the special meeting. If you want to vote in person at the virtual special meeting, you must register at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) prior to the deadline of \_\_\_\_\_, 2023 at \_\_\_\_\_ Eastern Time. You may be instructed to obtain

a legal proxy from your broker, bank or other nominee and to submit a copy in advance of the meeting. Further instructions will be provided to you as part of your registration process. You do not need to attend the special meeting to vote your shares. Shares represented by valid proxies, received in time for the special meeting and not revoked prior to the special meeting, will be voted at the special meeting. For instructions on how to change or revoke your proxy, see “May I Change or Revoke My Proxy?” below.

### **How Many Votes Do I Have?**

Each share of our common stock that you own entitles you to one vote.

### **How Do I Vote?**

Whether you plan to attend the virtual special meeting or not, we urge you to vote by proxy. All shares represented by valid proxies that we receive through this solicitation, and that are not revoked, will be voted in accordance with your instructions on the proxy card or as instructed via Internet or telephone. You may specify whether your shares should be voted for, against or abstain with respect to each of the proposals. If you properly submit a proxy without giving specific voting instructions, your shares will be voted in accordance with the Board's recommendations as noted below. Voting by proxy will not affect your right to attend the special meeting. If your shares are registered directly in your name through our stock transfer agent, Computershare Trust Company, N.A., or you have stock certificates registered in your name, you may vote:

- **By Internet or by telephone.** Follow the instructions on the proxy card to vote by Internet or telephone.
- **By mail.** If you received a proxy card by mail, you can vote by mail by completing, signing, dating and returning the proxy card as instructed on the card. If you sign the proxy card but do not specify how you want your shares voted, they will be voted in accordance with the Board's recommendations as noted below.
- **During the meeting.** To vote during the live webcast of the special meeting, you must first register at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023). Upon completing your registration, you will receive further instructions via email, including your unique link that will allow you access to the special meeting and to submit questions during the special meeting. Please be sure to follow instructions found on your proxy card and subsequent instructions that will be delivered to you via email.

**Telephone and Internet voting facilities for stockholders of record will be available 24 hours a day and will close at Eastern Time on \_\_\_\_\_, 2023.**

If your shares are held in “street name” (held in the name of a bank, broker or other holder of record), you will receive instructions from the holder of record. You must follow the instructions of the holder of record in order for your shares to be voted. Telephone and Internet voting also will be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you plan to vote your shares virtually at the special meeting, you must register at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) prior to the deadline of \_\_\_\_\_, 2023 at \_\_\_\_\_ Eastern Time. You may be instructed to obtain a legal proxy from your broker, bank or other nominee and to submit a copy in advance of the meeting. Further instructions will be provided to you as part of your registration process.

### **How Does the Board of Directors Recommend That I Vote on the Proposals?**

The Board of Directors recommends that you vote as follows:

- **“FOR”** approval of an amendment to our amended and restated certificate of incorporation, as amended, to effect a reverse stock split at a ratio of not less than 1-for-4 and not greater than 1-for-25, with the exact ratio to be set within that range at the discretion of our Board of Directors without further approval or authorization of our stockholders and with our Board of Directors able to elect to abandon such proposed amendment and not effect the reverse stock split authorized by stockholders, in its sole discretion (the “Reverse Split”);
- **“FOR”** the approval of an adjournment of the special meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt the Reverse Split proposal.

If any other matter is presented at the special meeting, your proxy provides that your shares will be voted by the proxy holder listed in the proxy in accordance with the proxy holder's best judgment. At the time this proxy statement was first made available, we knew of no matters that needed to be acted on at the special meeting, other than those discussed in this proxy statement. None of our directors or officers have any substantial interest in any matter to be acted upon.

### **May I Change or Revoke My Proxy?**

If you give us your proxy, you may change or revoke it at any time before the special meeting. You may change or revoke your proxy in any one of the following ways:

- if you received a proxy card, by signing a new proxy card with a date later than your previously delivered proxy and submitting



it as instructed above;

- by re-voting by Internet or by telephone as instructed above;
- by notifying Molecular Templates, Inc.'s Secretary in writing before the special meeting that you have revoked your proxy; or
- by attending the virtual special meeting and voting at the meeting. Attending the special meeting webcast will not in and of itself revoke a previously submitted proxy. You must specifically request at the special meeting that it be revoked.

Your most current vote, whether by telephone, Internet or proxy card is the one that will be counted.

### ***What if I Receive More Than One Proxy Card?***

You may receive more than one proxy card if you hold shares of our common stock in more than one account, which may be in registered form or held in street name. Please vote in the manner described above under "How Do I Vote?" for each account to ensure that all of your shares are voted.

### ***Will My Shares be Voted if I Do Not Vote?***

If your shares are registered in your name or if you have stock certificates, they will not be counted if you do not vote as described above under "How Do I Vote?" If your shares are held in street name and you do not provide voting instructions to the bank, broker or other nominee that holds your shares as described above, the bank, broker or other nominee that holds your shares has the authority to vote your unvoted shares only on certain of the proposals set forth in this proxy statement without receiving instructions from you. Therefore, we encourage you to provide voting instructions to your bank, broker or other nominee. This ensures your shares will be voted at the special meeting and in the manner you desire. A "broker non-vote" will occur if your broker cannot vote your shares on a particular matter because it has not received instructions from you and does not have discretionary voting authority on that matter.

### ***What Vote is Required to Approve Each Proposal and How are Votes Counted?***

#### **Proposal 1: Approve the Reverse Stock Split**

Currently, the affirmative vote of the holders of a majority of shares issued and outstanding on the record date for the special meeting is required to approve the Reverse Split proposal. Under this standard, broker non-votes, abstentions and shares of common stock that are not present in person or by proxy at the special meeting would have the same effect as a vote against the Reverse Split proposal. However, the Delaware General Assembly is considering amendments to the Delaware General Corporation Law that, in the form passed by the Delaware State Senate, would reduce the stockholder vote threshold required to approve the Reverse Split proposal to a requirement that, assuming a quorum is present, the votes cast for the Reverse Split proposal exceed the votes cast against the Reverse Split proposal. If such amendments are adopted and enacted into law prior to the special meeting in a form that, like the form adopted by the Delaware State Senate, is applicable to the Reverse Split proposal (among other things, because the shares of common stock are listed on a national securities exchange before the Reverse Split becomes effective and meet the listing requirements of that national securities exchange relating to the minimum number of holders immediately after the Reverse Split becomes effective), then, assuming a quorum is present, the Reverse Split proposal would be adopted if the votes cast for the Reverse Split proposal exceed the votes cast against the Reverse Split proposal. Assuming this voting standard is applicable and a quorum is present, broker non-votes, abstentions, and shares of common stock that are not present in person or by proxy at the special meeting would have no effect on the Reverse Split Proposal.

#### **Proposal 2: Approve Adjournment of Special Meeting**

The affirmative vote of a majority of shares present in person or represented by proxy at the meeting and entitled to vote thereon at the special meeting is required to approve the adjournment of the special meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt the Reverse Split proposal. Abstentions will be treated as votes against this proposal. Brokerage firms do not have authority to vote customers' unvoted shares held by the firms in street name on this proposal. Such broker non-votes will have no effect on the vote for this proposal.

### ***Is Voting Confidential?***

We will keep all the proxies, ballots and voting tabulations private. We only let our Inspector of Election, a representative of Alliance Advisors, examine these documents. Management will not know how you voted on a specific proposal unless it is necessary to meet legal requirements. We will, however, forward to management any written comments you make, on the proxy card or otherwise provide.

### ***Where Can I Find the Voting Results of the Special Meeting?***

The preliminary voting results will be announced at the special meeting, and we will publish preliminary, or final results if available, in a Current Report on Form 8-K within four business days of the special meeting. If final results are unavailable at the time we file the Form 8-K, then we will file an amended report on Form 8-K to disclose the final voting results within four business days after the final voting results are known.

### ***What Are the Costs of Soliciting these Proxies?***

We will pay all of the costs of soliciting these proxies. Our directors and employees may solicit proxies in person or by telephone, fax or email. We will pay these employees and directors no additional compensation for these services. We will ask banks, brokers and other institutions, nominees and fiduciaries to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses.

### ***What Constitutes a Quorum for the Special Meeting?***

The presence, in person or by proxy, of the holders of a majority of all outstanding shares of our common stock entitled to vote at the special meeting is necessary to constitute a quorum at the special meeting. Votes of stockholders of record who are present virtually at the special meeting, abstentions, and broker non-votes are counted for purposes of determining whether a quorum exists.

### ***Householding of Disclosure Documents***

SEC rules concerning the delivery of disclosure documents allow us or your broker to send a single Notice or, if applicable, a single set of our proxy materials to any household at which two or more of our stockholders reside, if we or your broker believe that the stockholders are members of the same family. This practice, referred to as "householding," benefits both you and us. It reduces the volume of duplicate information received at your household and helps to reduce our expenses. The rule applies to our Notices, proxy statements and information statements. Once you receive notice from your broker or from us that communications to your address will be "household," the practice will continue until you are otherwise notified or until you revoke your consent to the practice. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

If your household received a single Notice or, if applicable, a single set of proxy materials, but you would prefer to receive your own copy, please contact our transfer agent, Computershare Trust Company, N.A., by calling their toll-free number 1-888-451-0183.

If you do not wish to participate in "householding" and would like to receive your own Notice or, if applicable, set of Molecular Templates, Inc.'s proxy materials in the future, follow the instructions described below. Conversely, if you share an address with another Molecular Templates, Inc. stockholder and together both of you would like to receive only a single Notice or, if applicable, set of proxy materials, follow these instructions:

- If your Molecular Templates, Inc. shares are registered in your own name, please contact our transfer agent, Computershare Trust Company, N.A., and inform them of your request by calling them at 1-888-451-0183 or writing them at PO BOX 505000, Louisville, KY 40233-5000.
- If a broker or other nominee holds your Molecular Templates, Inc. shares, please contact the broker or other nominee directly and inform them of your request. Be sure to include your name, the name of your brokerage firm and your account number.

# Proposal No. 1

## Approval of Reverse Stock Split

### General

On June 28, 2023, the Board of Directors unanimously approved, subject to stockholder approval, a certificate of amendment to our amended and restated certificate of incorporation, as amended, to effect a reverse stock split of our outstanding common stock by combining outstanding shares of common stock into a lesser number of outstanding shares of common stock at a ratio of not less than 1-for-4 and not more than 1-for-25, with the exact ratio to be set within this range by our Board of Directors at its sole discretion (the "Reverse Stock Split"). In its sole discretion, the Board of Directors may alternatively elect to abandon such proposed certificate of amendment and not effect the Reverse Stock Split approved by stockholders. Upon the effectiveness of the certificate of amendment to our amended and restated certificate of incorporation, as amended, effecting the Reverse Stock Split, each share of our common stock will be issued for a specified number of shares in accordance with the ratio for the Reverse Stock Split selected by our Board of Directors.

If our stockholders approve the Reverse Stock Split, our Board of Directors would have the sole discretion to effect the Reverse Stock Split and to fix the specific ratio for the Reverse Stock Split, provided that the ratio would be not less than 1-for-4 and not more than 1-for-25. We believe that enabling our Board of Directors to fix the specific ratio of the Reverse Stock Split within the stated range will provide us with the flexibility to implement the split in a manner designed to maximize the anticipated benefits to us and our stockholders, as described below. The determination of the ratio of the Reverse Stock Split will be based on a number of factors, described further below under the heading "—Criteria to be Used for Decision to Apply the Reverse Stock Split."

If our stockholders approve the Reverse Stock Split, the Reverse Stock Split would become effective upon the time specified in the certificate of amendment to our amended and restated certificate of incorporation, as amended, as filed with the Secretary of State of the State of Delaware. The exact timing of the filing of the certificate of amendment and the Reverse Stock Split will be determined by our Board of Directors based on its evaluation as to when such action will be the most advantageous to us and our stockholders. In addition, our Board of Directors reserves the right, notwithstanding stockholder approval and without further action by our stockholders, to abandon the certificate of amendment and the Reverse Stock Split if, at any time prior to the filing of the certificate of amendment with the Secretary of State, our Board of Directors, in its sole discretion, determines that it is no longer in our best interest and the best interests of our stockholders to proceed.

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

- maintain the listing of our common stock on the Nasdaq Stock Market ("Nasdaq") and avoid delisting of our common stock from Nasdaq in the future on the basis of the Bid Price Rule (as defined below);
- broaden the pool of investors that may be interested in investing in our company by attracting new investors who would prefer not to invest in shares that trade at lower share prices; and
- make our common stock a more attractive investment to institutional investors.

In evaluating whether to effect the Reverse Stock Split, our Board of Directors has and will continue to consider negative factors associated with reverse stock splits. These factors include the negative perception of reverse stock splits held by many investors, analysts, and other stock market participants and the fact that the stock price of some companies that have effected reverse stock splits has subsequently declined back to pre-reverse stock split levels. In recommending the Reverse Stock Split, our Board of Directors determined that the potential benefits significantly outweighed these potential negative factors.

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

If our stockholders approve the Reverse Stock Split, our Board of Directors will be authorized to proceed with the Reverse Stock Split. The exact ratio of the Reverse Stock Split, within the 1-for-4 to 1-for-25 range, would be determined by our Board of Directors and publicly announced by us prior to the effective time of the Reverse Stock Split. In determining whether to proceed with the Reverse Stock Split and setting the appropriate ratio for the Reverse Stock Split, our Board of Directors will consider, among other things, factors such as:

- Nasdaq's minimum price per share requirements;
- the historical trading prices and trading volume of our common stock;

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

#### Reasons for the Reverse Stock Split

Our Board of Directors is seeking authority to effect the Reverse Stock Split with the primary intent of increasing the price of our common stock to meet the price criteria for continued listing on Nasdaq. Our common stock is publicly traded and listed on the Nasdaq Capital Market under the symbol "MTEM." Our Board of Directors believes that, in addition to increasing the price of our common stock to meet the price criteria for continued listing on the Nasdaq Capital Market, the Reverse Stock Split would also make our common stock more attractive to a broader range of institutional and other investors. Accordingly, for these and other reasons discussed below, we believe that effecting the Reverse Stock Split is in the Company's and the stockholders' best interests.

On August 31, 2022, we received a deficiency letter from the Listing Qualifications Department (the "Staff") of Nasdaq notifying us that because the closing bid price of our common stock was below \$1.00 for 30 consecutive days, the Company no longer met the bid price requirement under Nasdaq rules (the "Bid Price Requirement"). Additionally, following discussions with the Staff regarding the Company's anticipated compliance with the minimum stockholders' equity requirements for continued listing on The Nasdaq Global Select Market versus The Nasdaq Capital Market tier, we applied to transfer the listing of the Company's common stock to The Nasdaq Capital Market, and on November 30, 2022 received confirmation that the Staff had approved the transfer application, effective with the open of trading on December 2, 2022. The Nasdaq Capital Market operates in substantially the same manner as the Nasdaq Global Select Market and listed companies must meet certain financial requirements and comply with Nasdaq's corporate governance requirements, including the Bid Price Requirement.

Pursuant to Nasdaq Listing Rule 5810(c)(3)(A) (the "Compliance Period Rule"), we had an initial period of 180 calendar days, or until February 27, 2023, (the "Compliance Date") to regain compliance with the Bid Price Requirement. To regain compliance, the closing bid price of our common stock must meet or exceed \$1.00 per share for a minimum of 10 consecutive business days as required under the Compliance Period Rule (unless the Staff exercises its discretion to extend this ten-day period pursuant to Nasdaq Listing Rule 5810(c)(3)(H)). We did not regain compliance with the Bid Price Requirement by the Compliance Date and, as a result, on February 28, 2023, we received notice from the Staff that our securities would be subject to delisting, unless the Company timely requested a hearing before the Nasdaq Hearings Panel (the "Panel").

We timely requested a hearing before the Panel, which hearing took place on April 13, 2023. At the Panel, we presented our plan to regain compliance with the Bid Price Requirement. On May 8, 2023, we received the Panel's decision, which granted our request for an extension to regain compliance by August 28, 2023, subject to certain conditions as set forth by the Panel.

In the event we are delisted from Nasdaq, the only established trading market for our common stock would be eliminated, and we would be forced to list our shares on the OTC Markets or another quotation medium, depending on our ability to meet the specific listing requirements of those quotation systems. 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. We believe that effecting the Reverse Stock Split may help us avoid delisting from Nasdaq and any resulting consequences.

In addition, our Board of Directors believes that the increase in the market price of our common stock that will result from the Reverse Stock Split could encourage investor interest and improve the marketability of our common stock to a broader range of investors, and thus enhance our liquidity. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Additionally, because brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, the current share price of our common stock may result in an investor paying transaction costs that represent a higher percentage of total share value than would be the case if our share price were higher. Our Board of Directors believes that the higher share price that may result from the Reverse Stock Split could enable institutional investors and brokerage firms with such policies and practices to invest in our common stock.

The Reverse Stock Split may not result in a permanent increase in the market price of our common stock, which will continue to be dependent on many factors, including general economic, market and industry conditions and other factors detailed from time to time in the reports we file with the SEC.

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

There can be no assurance that the total market capitalization of our common stock after the implementation of the Reverse Stock Split will be equal to or greater than the total market capitalization before the Reverse Stock Split. Also, we cannot assure you that the Reverse Stock Split will lead to a sustained increase in the trading price of our common stock. The trading price of our common stock may change due to a variety of other factors, including our ability to successfully accomplish our business goals, market conditions, and the market perception of our business. You should also keep in mind that the implementation of the Reverse Stock Split does not have an effect on the actual or intrinsic value of our business or a stockholder's proportional ownership in our company (subject to the treatment of fractional shares). However, should the overall value of our common stock decline after the proposed Reverse Stock Split, then the actual or intrinsic value of the shares of our common stock held by you will also proportionately decrease as a result of the overall decline in value.

While our Board of Directors has proposed the Reverse Stock Split to bring the price of our common stock back above \$1.00 per share to meet the requirements for the continued listing of our common stock on Nasdaq, there is no guarantee that the price of our common stock will not decrease in the future, or that our common stock will remain in compliance with Nasdaq listing standards. Additionally, there can be no guarantee that the closing bid price of our common stock will remain at or above \$1.00 for 10 consecutive trading days, whether following the Reverse Stock Split or otherwise, which is required to cure our current Nasdaq listing standard deficiency.

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

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

If our stockholders approve the Reverse Stock Split and our Board of Directors elects to effect the Reverse Stock Split, we would adjust and proportionately decrease the number of shares of our common stock reserved for issuance upon exercise of, and adjust and proportionately increase the exercise price of, all options and warrants and other rights to acquire our common stock. In addition, as of the effective time of the Reverse Stock Split, we would adjust and proportionately decrease the total number of shares of our common stock that may be the subject of the future grants under our stock plans.

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

After the effective time of the Reverse Stock Split, our common stock will have a new Committee on Uniform Securities Identification Procedures ("CUSIP") number, which is a number used to identify our equity securities, and stock certificates with the older CUSIP numbers will need to be exchanged for stock certificates with the new CUSIP numbers by following the procedures described below.

Our directors and executive officers have no substantial interests, directly or indirectly, in the matters set forth in the Reverse Stock Split, 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 Stock Split as all other outstanding shares of our common stock and securities exercisable for our common stock.

### **Authorized Shares of Common Stock**

We are currently authorized under our amended and restated certificate of incorporation, as amended, to issue up to a total of 152,000,000 shares of capital stock, comprised of 150,000,000 shares of common stock and 2,000,000 shares of preferred stock. While the Reverse Stock Split would decrease the number of outstanding shares of our common stock, it would not change the number of authorized shares under our amended and restated certificate of incorporation, as amended. Consequently, the Reverse Stock Split would have the effect of increasing the number of shares of common stock available for issuance under our amended and restated certificate of incorporation, as amended. Our Board of Directors believes that such an increase is in our and our stockholders' best interests as it would provide us with greater flexibility to issue shares of common stock in connection with possible future financings as under our equity incentive plans and for other general corporate purposes.

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

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

#### **Procedure for Effecting a Reverse Stock Split and Exchange of Stock Certificates**

If stockholders approve the Reverse Stock Split, and if our Board of Directors determines to effect the Reverse Stock Split (with the ratio to be determined in the discretion of the board within the parameters described), we will file with the Secretary of State of the State of Delaware a certificate of amendment to our restated certificate of incorporation, as amended, in the form attached hereto as Appendix A (the "Certificate of Amendment"), reflecting such reverse stock split ratio determined by the Board of Directors. The Reverse Stock Split will become effective at the time and on the date of filing of, or at such later time as is specified in, the Certificate of Amendment, which we refer to as the "effective time" and the "effective date," respectively. The effective time of the Certificate of Amendment shall be determined in the discretion of our Board of Directors and in accordance with applicable law. Beginning at the effective time, each certificate representing shares of common stock will be deemed for all corporate purposes to evidence ownership of the number of whole shares into which the shares previously represented by the certificate were combined pursuant to the Reverse Stock Split.

Our Board of Directors has approved the amendment to our amended and restated certificate of incorporation, as amended. The ratio of the Reverse Stock Split, within the parameters described, and the implementation and timing of such Reverse Stock Split shall be determined in the discretion of our Board of Directors.

If the Reverse Stock Split is implemented, our transfer agent will advise registered stockholders of the procedures to be followed to exchange certificates in a letter of transmittal to be sent to stockholders. No written confirmations will be issued to a stockholder until the stockholder has surrendered the stockholder's outstanding certificate(s), together with the properly completed and executed letter of transmittal, to our transfer agent. Any old shares submitted for transfer, whether pursuant to a sale, other disposition or otherwise, will automatically be exchanged for new shares. Our common stock will also receive a new CUSIP number.

Certain of our registered stockholders hold some or all of their shares electronically in book-entry form with our transfer agent. These stockholders do not hold physical certificates evidencing their ownership of our common stock. However, they are provided with a statement reflecting the number of shares of our common stock registered in their accounts. If a stockholder holds shares of common stock in book-entry form with our transfer agent, no action needs to be taken to receive post-Reverse Stock Split shares or payment in lieu of fractional shares, if applicable. If a stockholder is entitled to post-Reverse Stock Split shares, a transaction statement will automatically be sent to the stockholder's address of record indicating the number of shares of our common stock held following the Reverse Stock Split.

Upon the Reverse Stock Split, we intend to treat stockholders holding our common stock in "street name," through a broker, bank or other nominee, in the same manner as registered stockholders whose shares are registered in their names. Brokers, banks or other nominees will be instructed to effect a reverse stock split for their beneficial holders holding our common stock in "street name." However, these brokers, banks or other nominees may have different procedures than registered stockholders for processing a reverse stock split. If you hold your shares with a broker, bank or other nominee and if you have any questions in this regard, we encourage you to contact your nominee.

#### **Fractional Shares**

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

#### **No Appraisal Rights**

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

#### **Accounting Matters**

The Reverse Stock Split would not affect the per-share par value of our common stock, which would remain at \$0.001 par value per share, while the number of outstanding shares of common stock would decrease in accordance with the Reverse Stock Split ratio. As a

result, as of the effective time of the Reverse Stock Split, the stated capital attributable to common stock on our balance sheet would decrease, and the additional paid-in capital account on our balance sheet would increase by an offsetting amount. Following the Reverse Stock Split, the reported per-share net income or loss would be higher because there would be fewer shares of common stock outstanding, and we would adjust historical per share amounts set forth in our future financial statements.

#### **Reservation of Right to Abandon the Amendment to our Restated Certificate of Incorporation, As Amended**

Our Board of Directors reserves the right to abandon the amendment to our amended and restated certificate of incorporation, as amended, described in this proposal without further action by our stockholders at any time before the effective time, even if stockholders approve such amendment at the special meeting. By voting in favor of the amendment to our amended and restated certificate of incorporation, as amended, stockholders are also expressly authorizing the Board of Directors to determine not to proceed with and abandon the Reverse Stock Split if it should so decide.

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

The following discussion summarizes the material U.S. federal income tax consequences of the proposed Reverse Stock Split to us and to U.S. Holders (as defined below). This discussion is based on the Internal Revenue Code of 1986, as amended, which we refer to as the Code, U.S. Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, which we refer to as 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, and there can be no assurance that the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the proposed Reverse Stock Split.

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

This 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 our 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, persons whose functional currency is not the U.S. dollar, persons who acquired their common stock pursuant to the exercise of employee stock options or otherwise as compensation, or U.S. Holders 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 Stock 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 Stock 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 Stock Split, whether or not they are in connection with the proposed Reverse Stock Split. This discussion should not be considered as tax or investment advice, and the tax consequences of the proposed Reverse Stock Split may not be the same for all stockholders.

**Each stockholder should consult his, her or its own tax advisors concerning the particular U.S. federal tax consequences of the proposed Reverse Stock Split, as well as the consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences.**

**Tax Consequences to the Company.** The proposed Reverse Stock Split is intended to be treated as a "recapitalization" pursuant to Section 368(a)(1) (E) of the Code. As a result, we should not recognize taxable income, gain, or loss in connection with the proposed Reverse Stock Split.

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

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

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

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

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

Currently, the affirmative vote of the holders of a majority of shares issued and outstanding is required to approve this proposal. However, the Delaware General Assembly is considering amendments to the Delaware General Corporation Law that, in the form passed by the Delaware State Senate, would reduce the stockholder vote threshold required to approve this proposal. If such amendments are adopted and enacted into law prior to the special meeting in a form that, like the form adopted by the Delaware State Senate, is applicable to this proposal, in order to approve this proposal, the votes cast "FOR" this proposal must exceed the votes cast "AGAINST" this proposal.

**OUR BOARD OF DIRECTORS RECOMMENDS THAT STOCKHOLDERS VOTE TO APPROVE OF THE REVERSE STOCK SPLIT, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH APPROVAL UNLESS A STOCKHOLDER INDICATES OTHERWISE ON THE PROXY.**



## Proposal No. 2

# Approval of the Adjournment of the Special Meeting to a Later Date or Dates, if Necessary or Appropriate, to Solicit Additional Proxies if there are Insufficient Votes to Adopt the Reverse Split Proposal.

If at the special meeting, the number of votes represented by shares of the common stock, present or represented and voting in favor of the Reverse Split proposal is insufficient to approve the Reverse Split proposal or establish a quorum, our management may move to adjourn the special meeting in order to enable our Board of Directors to continue to solicit additional proxies in favor of the Reverse Split proposal.

In this proposal, we are asking our stockholders to authorize the holder of any proxy solicited by our Board of Directors to vote in favor of adjourning, postponing or continuing the special meeting and any later adjournments. If our stockholders approve the adjournment proposal, we could adjourn, postpone or continue the special meeting, and any adjourned session of the special meeting, to use the additional time to solicit additional proxies in favor of the Reverse Split proposal, including the solicitation of proxies from stockholders that have previously voted against the proposals. Among other things, approval of the adjournment proposal could mean that, even if proxies representing a sufficient number of votes against the Reverse Split proposal have been received, we could adjourn, postpone or continue the special meeting without a vote on the Reverse Split proposal and seek to convince the holders of those shares to change their votes to votes in favor of the approval of the Reverse Split proposal.

The affirmative vote of a majority of shares present in person or represented by proxy at the meeting and entitled to vote thereon at the special meeting is required to approve the adjournment of the special meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt the Reverse Split proposal.

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE TO APPROVE THE ADJOURNMENT OF THE SPECIAL MEETING TO A LATER DATE OR DATES, IF NECESSARY OR APPROPRIATE, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE INSUFFICIENT VOTES TO ADOPT THE REVERSE SPLIT PROPOSAL, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH APPROVAL UNLESS A STOCKHOLDER INDICATES OTHERWISE ON THE PROXY.**

# Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of June 20, 2023 for:

- our named executive officers for the year ended December 31, 2022,
- each of our directors,
- all of our current directors and executive officers as a group, and
- each stockholder known by us to own beneficially more than 5% of our common stock.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. We deem shares of common stock that may be acquired by an individual or group within 60 days of June 20, 2023 pursuant to the conversion of our Series A Preferred Stock and exercise of options or warrants, each to the extent applicable, to be outstanding for the purpose of computing the percentage ownership of such individual or group but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table. Each share of our common stock is entitled to one vote on each matter considered at the special meeting and shares of our Series A Preferred Stock do not have any voting rights, unless converted into common stock. Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them based on information provided to us by these stockholders. Percentage of ownership is based 56,351,647 shares of common stock outstanding on June 20, 2023.

Name and Address of Beneficial Owner**	Shares Beneficially Owned	
	Number	Percent
<b>Five Percent Stockholders:</b>		
Biotech Target N.V. (1) Ara Hill Top Building Unit A-5 Pletterijwg Oost 1, Curacao	11,192,003	19.9%
Entities affiliated with SHV Management Services LLC (2) c/o Santé Ventures 201 West 5th Street, Suite 1500 Austin, Texas 78701	7,258,100	12.9%
Longitude Venture Partners III, L.P. (3) 2740 Sand Hill Road, 2nd Floor Menlo Park, CA 94025	4,647,302	8.0%
BVF Partners, L.P. (4) 44 Montgomery St., 40th Floor San Francisco, CA 94104	5,246,565	9.3%
K2 HealthVentures Equity Trust LLC (5) 855 Boylston Street, 10th Floor Boston, MA 02116	6,250,680	10.0%

Name and Address of Beneficial Owner**	Shares Beneficially Owned	
	Number	Percent
<b>Named Executive Officers and Directors:</b>		
Eric E. Poma, Ph.D. (6)	2,181,738	3.7%
Jason S. Kim (7)	893,473	1.6%
Roger J. Waltzman (8)	405,000	*
David R. Hoffmann (9)	106,817	*
Kevin Lalande (10)	7,358,100	13.0%
Jonathan Lanfear (11)	30,000	*
Corsee Sanders, Ph.D. (12)	70,000	*
Harold E. Selick, Ph.D. (13)	140,806	*
Gabriela Gruia, M.D. (14)	27,500	*
All directors and current executive officers as a group (9 persons) (15)	11,213,434	18.7%

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

- \*\* Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Molecular Templates, Inc., 9301 Amberglen Blvd., Suite 100, Austin TX 78729.
- (1) This information is based solely on a Schedule 13G filed with the SEC on February 14, 2023. Consists of 11,192,003 shares of common stock held by Biotech Target N.V. BB Biotech AG is the sole stockholder of Biotech Target N.V. and may be deemed to share voting and investment power over our securities held by Biotech Target N.V. BB Biotech AG disclaims beneficial ownership of these securities except to the extent of its pecuniary interest therein.
  - (2) This information is based solely on a Form 4 filed with the SEC on June 21, 2022. Consists of (i) 864,665 shares of common stock held by Santé Health Ventures I Annex Fund, L.P., (ii) 4,827 shares of common stock issuable upon exercise of warrants held by Santé Health Ventures I Annex Fund, L.P., (iii) 6,097,298 shares of common stock held by Santé Health Ventures I, L.P., (iv) 19,310 shares of common stock issuable upon exercise of warrants held by Santé Health Ventures I, L.P., (v) 50,000 shares of common stock held by SHV Management Services, L.P. and (vi) 222,000 shares of common stock held by SHVMS, LLC. The securities held by Santé Health Ventures I Annex Fund, L.P., Santé Health Ventures I, L.P. and SHVMS, LLC may be deemed to be beneficially owned by Kevin Lalonde, a member of our Board, Joe Cunningham, M.D. and Douglas D. French, who are managing directors (the "SHV Directors") of SHV Management Services, LLC ("SHV Management"). SHV Management is the general partner of SHV Annex Services, LP, which is the general partner of Santé Health Ventures I Annex Fund, L.P. SHV Management is also the general partner of SHV Management Services, LP, which is the general partner of Santé Health Ventures I, L.P. Each of the SHV Directors, SHV Management, SHV Annex Services, LP and SHV Management Services, LP disclaims beneficial ownership of these securities except to the extent of its or his pecuniary interest therein.
  - (3) This information is based solely on a Schedule 13D/A filed with SEC on February 14, 2023. Consists of (i) 3,199,035 shares of common stock held by Longitude Venture Partners III, L.P. ("Longitude Venture III") and (ii) 1,448,267 shares of common stock issuable upon exercise of warrants held by Longitude Venture III. Such securities are held by Longitude Venture III and may be deemed to be beneficially owned by Longitude Capital Partners III, LLC ("Longitude Capital III"), Patrick G. Enright, and Juliet Tammenoms Bakker. Longitude Capital III is the general partner of Longitude Venture III and may be deemed to share voting and investment power over our securities held by Longitude Venture III. Mr. Enright and Ms. Bakker are the managing members of Longitude Capital III, and all of them may be deemed to share voting and investment power over our securities held by Longitude Venture III. Each of Longitude Capital III, Mr. Enright and Ms. Bakker disclaims beneficial ownership of these securities except to the extent of its, his or her pecuniary interest therein.
  - (4) This information is based solely on a Schedule 13G filed with the SEC on February 14, 2023. Consists of (i) 2,832,414 shares of common stock beneficially owned by Biotechnology Value Fund, L.P. ("BVF"), including 128,000 shares of common stock issuable upon conversion of 128 shares of Series A Convertible Preferred Stock ("Series A Preferred Stock") held by BVF, (ii) 2,085,580 shares of common stock beneficially owned by Biotechnology Value Fund II, L.P. ("BVF2"), including 104,000 shares of common stock issuable upon conversion of 104 shares of Series A Preferred Stock held by BVF2, and (iii) 250,575 shares of common stock beneficially owned by Biotechnology Value Trading Fund OS LP ("Trading Fund OS"), including 18,000 shares of common stock issuable upon conversion of 18 shares of Series A Preferred Stock held by Trading Funds OS. BVF Partners OS Ltd. ("Partners OS"), as the general partner of Trading Fund OS, may be deemed to beneficially own the shares of common stock beneficially owned by Trading Fund OS. BVF Partners, L.P. ("Partners") as the investment manager of BVF, BVF2, Trading Fund OS, and the sole member of Partners OS, may be deemed to beneficially own the shares of common stock beneficially owned in the aggregate by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts. BVF Inc., as the general partner of Partners, may be deemed to beneficially own the shares of Common Stock owned by Partners. Mark N. Lampert, as a director and officer of BVF Inc., may be deemed to beneficially own the shares of Common Stock beneficially owned by BVF Inc. The foregoing excludes (i) 168,508 shares of common stock issuable upon the exercise of warrants held by BVF, (ii) 108,536 shares of common stock issuable upon the exercise of warrants held by BVF2, and (iii) 30,190 shares of common stock issuable upon the exercise of warrants held by Trading Funds OS. The shares of Series A Preferred Stock are only convertible to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would not beneficially own more than 9.99% of the outstanding shares of common stock after giving effect to such conversion, as such percentage ownership is determined in accordance with the terms and provisions of the Company's Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock. The warrants referenced above have an exercise price of \$6.8423 per share and expire on August 1, 2024, but are only exercisable to the extent that the holder, together with its affiliates and any other person or entity acting as a group, would not beneficially own more than 4.99% of the outstanding shares of common stock after giving effect to such exercise, as such percentage ownership is determined in accordance with the terms of the warrants. Partners OS disclaims beneficial ownership of the shares of common stock beneficially owned by Trading Fund OS. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the shares of common stock beneficially owned by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts.
  - (5) This information is based solely on a Schedule 13G filed with the SEC on June 26, 2023. Consists of that the right to acquire within 60 days upon (i) exercise of warrants to purchase 5,103,343 shares of Common Stock at an exercise of \$0.3919 per share, which warrants expire on June 16, 2033, (the "Warrants") directly held by K2HV Equity, and (ii) exercise of a contingent value right to convert up to \$3,000,000 of the remaining balance of the Issuer's outstanding debt obligations to K2 Health Ventures LLC under the Loan and Security Agreement, dated as of May 21, 2020, into 6,124,011 shares of Common Stock in lieu of receiving cash payment (the "CVR") directly held by K2HV Equity. Pursuant to the terms of each of the Convertible Secured Contingent Value Right Agreement, dated June 16, 2023 and the Warrants, the Reporting Persons may not convert any portion of the CVR, or exercise any portion of the Warrant, into shares of Common Stock to the extent that, upon conversion or exercise, the beneficial ownership of the Reporting Persons (including any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Reporting Persons' beneficial ownership for purposes of Section 13(d) of the Act) would exceed 9.985% of the total number of shares of Common Stock outstanding.
  - (6) Consists of (i) 277,615 shares of common stock held by Dr. Poma and (ii) 1,904,123 shares of our common stock issuable upon the exercise of options to purchase common stock held by Dr. Poma exercisable within 60 days of June 20, 2023.
  - (7) Consists of (i) 95,493 shares of our common stock and (ii) 797,980 shares of our common stock issuable upon the exercise of options to purchase common stock held by Mr. Kim exercisable within 60 days of June 20, 2023.
  - (8) Consists of 405,000 shares of common stock issuable upon exercise of options to purchase common stock held by Dr. Waltzman exercisable within 60 days of June 20, 2023.
  - (9) Consists of 106,817 shares of our common stock issuable upon the exercise of options to purchase common stock held by Mr. Hoffmann exercisable within 60 days of June 20, 2023.
  - (10) Shares reported as beneficially owned by Mr. Lalonde include (i) 864,665 shares of common stock held by Santé Health Ventures I Annex Fund, L.P., (ii) 4,827 shares of common stock issuable upon exercise of warrants held by Santé Health Ventures I Annex Fund, L.P., (iii) 6,097,298 shares of common stock held by Santé Health Ventures I, L.P., (iv) 19,310 shares of common stock issuable upon exercise of warrants held by Santé Health Ventures I, L.P., (v) 50,000 shares of common stock held by SHV Management Services, L.P., (vi) 222,000 shares of common stock held by SHVMS, LLC. and (vii) 100,000 shares of our common stock issuable upon the exercise of options to purchase common stock held by Mr. Lalonde exercisable within 60 days of June 20, 2023. The securities held by Santé Health Ventures I, L.P., Santé Health Ventures I Annex Fund, L.P. and SHVMS, LLC may be deemed to be beneficially owned by Mr. Lalonde, who is a managing director of SHV Management Services, LLC, which is the general partner of SHV Management Services, LP, which is the general partner of Santé Health Ventures I, L.P., and

SHV Annex Services, LP, which is the general partner of Santé Health Ventures I Annex Fund, L.P. As a managing director of SHV Management Services, LLC, Mr. Lalande may be deemed to share voting and investment power over these securities held by Santé Health Ventures I, L.P. and Santé Health Ventures I Annex Fund, L.P. Mr. Lalande disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein.

- (11) Consists of 30,000 shares of our common stock issuable upon the exercise of options to purchase common stock held by Mr. Lanfear exercisable within 60 days of June 20, 2023.
- (12) Consists of 70,000 shares of our common stock issuable upon the exercise of options to purchase common stock held by Dr. Sanders exercisable within 60 days of June 20, 2023.
- (13) Consists of (i) 40,806 shares of our common stock held by Dr. Selick and (ii) 100,000 shares of our common stock issuable upon the exercise of options to purchase common stock within 60 days of June 20, 2023.
- (14) Consists of 27,500 shares of our common stock issuable upon the exercise of options to purchase common stock held by Dr. Gruia exercisable within 60 days of June 20, 2023.
- (15) See footnotes (6) through (14) above.

## Other Matters

The Board knows of no other business which will be presented to the special meeting. If any other business is properly brought before the special meeting, proxies will be voted in accordance with the judgment of the persons named therein.

## Stockholder Communications

Stockholders wishing to communicate with the board of directors or with an individual member of the Board of Directors may do so by writing to the Board of Directors or to the particular member of the Board of Directors, care of the Corporate Secretary by mail to our principal executive offices, Attention: Corporate Secretary. The envelope should indicate that it contains a stockholder communication. All such stockholder communications will be forwarded to the director or directors to whom the communications are addressed.

Austin, Texas  
June 30, 2023

Appendix A

CERTIFICATE OF AMENDMENT  
OF  
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
MOLECULAR TEMPLATES, INC.

Molecular Templates, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

**FIRST:** The name of the corporation is Molecular Templates, Inc. (the "Corporation").

**SECOND:** The date of filing of the original Certificate of Incorporation of the Corporation with the Secretary of State of the State of Delaware was October 17, 2001, which Certificate of Incorporation was amended on August 1, 2017.

**THIRD:** The Board of Directors (the "Board") of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the Delaware General Corporation Law (the "DGCL"), adopted resolutions amending its Certificate of Incorporation as follows:

Paragraph A of Article Fourth of the Corporation's Amended and Restated Certificate of Incorporation is hereby amended to add the following at the end said Paragraph A, which shall read in its entirety as follows:

"Effective at 5:00 p.m., Eastern time, on the date this Certificate of Amendment to the Amended and Restated Certificate of Incorporation is filed with the Secretary of State of the State of Delaware (the "Effective Time"), each [INTENTIONALLY LEFT BLANK]\* shares of the Corporation's Common Stock, par value \$0.001 per share, issued and outstanding immediately prior to the Effective Time ("Old Common Stock") shall, automatically and without any action on the part of the Corporation or the respective holders thereof, be combined and reclassified into one (1) share of Common Stock, par value \$0.001 per share, of the Corporation ("New Common Stock"). Notwithstanding the immediately preceding sentence, no fractional shares of New Common Stock shall be issued in the reclassification and, in lieu thereof, upon receipt after the Effective Time by the exchange agent selected by the Corporation of a properly completed and duly executed transmittal letter and, where shares are held in certificated form, the surrender of the stock certificate(s) formerly representing shares of Old Common Stock, any stockholder who would otherwise be entitled to a fractional share of New Common Stock as a result of the foregoing combination and reclassification of the Old Common Stock (such combination and reclassification, the "Reverse Stock Split"), following the Effective Time (after taking into account all fractional shares of New Common Stock otherwise issuable to such stockholder), shall be entitled to receive a cash payment (without interest) equal to the fractional share of New Common Stock to which such stockholder would otherwise be entitled multiplied by the closing sales price of a share of the Corporation's Common Stock (as adjusted to give effect to the Reverse Stock Split) as reported on The Nasdaq Capital Market on the date this Certificate of Amendment to the Amended and Restated Certificate of Incorporation is filed with the Secretary of State of the State of Delaware. Each stock certificate that, immediately prior to the Effective Time, represented shares of Old Common Stock shall, from and after the Effective Time, automatically and without any action on the part of the Corporation or the respective holders thereof, represent that number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been combined and reclassified (as well as the right to receive cash in lieu of any fractional shares of New Common Stock as set forth above); *provided, however*, that each holder of record of a certificate that represented shares of Old Common Stock shall receive, upon surrender of such certificate, a new certificate representing the number of whole shares of New Common Stock into which the shares of Old Common Stock represented by such certificate shall have been combined and reclassified, as well as any cash in lieu of fractional shares of New Common Stock to which such holder may be entitled as set forth above."

**FOURTH:** Thereafter, pursuant to a resolution by the Board, this Certificate of Amendment was submitted to the stockholders of the Corporation for their approval in accordance with the provisions of Section 211 and 242 of the DGCL. Accordingly, said proposed amendment has been adopted in accordance with Section 242 of the DGCL.

\* This amendment approves the reverse stock split of the Corporation's common stock, at a ratio in the range of 1-for-4 and 1-for-25. By approving this amendment, the stockholders of the Corporation would be deemed to approve any ratio within the range referred to above.

PROXY

MOLECULAR TEMPLATES, INC.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS OF  
MOLECULAR TEMPLATES, INC.  
FOR THE SPECIAL MEETING OF STOCKHOLDERS  
TO BE HELD ON \_\_\_\_\_, \_\_\_\_\_, 2023 AT \_\_\_\_\_ (EDT)

The undersigned hereby appoints Eric E. Poma, Ph.D. and Megan C. Filoon as proxies, each with full power of substitution and revocation, and hereby authorizes each of them to represent and to vote, as designated on the reverse side, all shares of common stock of Molecular Templates, Inc. held of record by the undersigned at the close of business on \_\_\_\_\_, 2023 (the "Record Date"), at the 2023 Special Meeting of Stockholders to be held on \_\_\_\_\_, \_\_\_\_\_, 2023 at \_\_\_\_\_ (EDT) (the "Special Meeting") and at any adjournment or postponement thereof, and further authorizes such proxies to vote in their discretion upon such other matters as may properly come before such Special Meeting (including any motion to amend the resolutions proposed at the Special Meeting and any motions to adjourn such meeting) and at any adjournment or postponement thereof. The Special Meeting will be held virtually via the Internet. In order to attend the Special Meeting, you must register at [www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023) by \_\_\_\_\_ (EDT) on \_\_\_\_\_, 2023. If you have properly registered, you will receive a registration confirmation with a link to attend the virtual Special Meeting. On the day of the Special Meeting, if you have properly registered, you may enter the meeting by clicking on the link provided and entering the password you received via email in your registration confirmation. Further instructions on how to attend and vote at the Special Meeting are contained in the Proxy Statement in the "Important Information About the Special Meeting and Voting" section, specifically "How Do I Attend the Special Meeting?" and "How Do I Vote?"

This proxy card, when properly executed and delivered, will be voted in the manner directed on the reverse side. If no designation is made, the shares will be voted as the Board of Directors recommends, as indicated on the reverse side, and in the discretion of the proxy upon such other matters as may properly come before the Special Meeting.

(Continued and to be marked, dated, and signed on the other side)

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▲ PLEASE DETACH ALONG PERFORATED LINE AND MAIL IN THE ENVELOPE PROVIDED. ▲

Important Notice for Molecular Templates, Inc. Stockholders  
2023 Special Meeting of Stockholders

\_\_\_\_\_, \_\_\_\_\_, 2023  
\_\_\_\_\_ Eastern Daylight Time

Important Notice Regarding the Availability of Proxy Materials:

The Proxy Statement is available at:  
[www.viewproxy.com/MTEM/2023](http://www.viewproxy.com/MTEM/2023)

Please mark your votes like this

**THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" EACH PROPOSAL 1 AND 2.**

**Proposal 1.** An amendment to our amended and restated certificate of incorporation, as amended to effect a reverse stock split at a ratio of not less than 1-for-4 and not greater than 1-for-25, with the exact ratio to be set within that range at the discretion of our Board of Directors (the "Reverse Split Proposal"); and

FOR       AGAINST       ABSTAIN

DO NOT PRINT IN THIS AREA  
(Stockholder Name & Address Data)

**Proposal 2.** The adjournment of the Special Meeting to a later date or dates, if necessary or appropriate, to solicit additional proxies if there are insufficient votes to adopt the Reverse Split Proposal.

FOR       AGAINST       ABSTAIN

Date \_\_\_\_\_

Signature \_\_\_\_\_

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

Address changes/comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Address Change/Comments: (If you noted any Address Changes and/or Comments above, please mark box.)

**VIRTUAL CONTROL NUMBER**

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▲ PLEASE DETACH ALONG PERFORATED LINE AND MAIL IN THE ENVELOPE PROVIDED. ▲

**VIRTUAL CONTROL NUMBER**

→

**PROXY VOTING INSTRUCTIONS**

Please have your control number ready when voting by Internet or Telephone.



**INTERNET**

**Vote Your Proxy on the Internet:**  
Go to [www.AALvote.com/MTEM](http://www.AALvote.com/MTEM)

Have your proxy card available when you access the above website. Follow the prompts to vote your shares.



**TELEPHONE**

**Vote Your Proxy by Phone:**  
Call (866) 804-9616

Use any touch-tone telephone to vote your proxy. Have your proxy card available when you call. Follow the voting instructions to vote your shares.



**MAIL**

**Vote Your Proxy by Mail:**

Mark, sign, and date your proxy card, then detach it and return it in the postage-paid envelope provided.