SCHEDULE 14A INFORMATION

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

Filed by the Registrant $extsf{ }$

Filed by a Party other than the Registrant \Box

Check the appropriate box:

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

REPARE 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.



P.O. BOX 8016, CARY, NC 27512-9903

Repare Therapeutics Inc. Important Notice Regarding the Availability of Proxy Materials

Shareholders Meeting to be held on June 8, 2023

For Shareholders of record as of April 10, 2023

This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. This is not a ballot. You cannot use this notice to vote your shares. We encourage you to access and review all of the important information contained in the proxy materials before voting. To appoint a third party proxyholder, a shareholder of record must return its proxy card by mail in accordance with the instructions provided in the proxy materials by no later than 10:00 A.M., Eastern Time, on June 6, 2023.

To view the proxy materials, and to obtain directions to attend the meeting, go to: www.proxydocs.com/RPTX

To vote your proxy while visiting this site, you will need the 12 digit control number in the box below.

Under United States Securities and Exchange Commission rules, proxy materials do not have to be delivered in paper. Proxy materials can be distributed by making them available on the internet



For a convenient way to view proxy materials and VOTE go to www.proxydocs.com/RPTX



Have the 12 digit control number located in the shaded box above available when you access the website and follow the instructions.

If you want to receive a paper or e-mail copy of the proxy materials, you must request one. There is no charge to you for requesting a copy. In order to receive a paper package in time for the deadline to submit voting instructions, as applicable, and this year's meeting, you must make this request on or before 5:00 PM, Eastern Time, on May 26, 2023.

To order paper materials, use one of the following methods.



Place: Annual Meeting to be held live via the Internet - please visit www.proxydocs.com/RPTX for more details.

For information about this notice, please call (888) 464-5457.

You must pre-register to attend the meeting online and/or participate at www.proxydocs.com/RPTX.

SEE REVERSE FOR FULL AGENDA

Repare Therapeutics Inc. Annual Meeting of Shareholders

THE BOARD OF DIRECTORS RECOMMENDS A VOTE FOR EACH OF THE DIRECTOR NOMINEES LISTED IN PROPOSAL 1 AND FOR PROPOSALS 2 AND 3

PROPOSAL

- To elect our three nominees as Class III directors: Samarth Kulkarni, Ph.D., Briggs Morrison, M.D. and Lloyd M. Segal, to our board of directors, each to hold office until our Annual Meeting of Shareholders in 2026.
 - 1.01 Samarth Kulkarni, Ph.D.

1.02 Briggs Morrison, M.D.

- 1.03 Lloyd M. Segal
- 2. To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in this proxy statement.
- To appoint Ernst & Young LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2023, and to authorize the Company's board of directors to fix Ernst & Young LLP's remuneration.

NOTE: To conduct any other business properly brought before the Annual Meeting

For additional information, see "Proposal 1: Election of Directors", "Proposal 2: Advisory Vote On Executive Compensation", and "Proposal 3: Ratification of Selection of Independent Registered Public Accounting Firm" of the proxy statement for the 2023 Annual Meeting of Shareholders of Repare Therapeutics Inc.