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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 3, 2023

Repare Therapeutics Inc.
(Exact Name of Registrant as Specified in Its Charter)

Québec	001-39335	Not applicable
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

7171 Frederick-Banting, Building 2 St-Laurent, Québec, Canada	H4S 1Z9
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: (857) 412-7018

7210 Frederick-Banting, Suite 100
St-Laurent, Québec, H4S 2A1, Canada
(Former Name or Former Address, if Changed Since Last Report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common shares, no par value	RPTX	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On October 4, 2023, American Association for Cancer Research ("AACR") published an abstract (abstract B156) to its website which shares initial data from Module 1 and 2 of the ongoing Phase 1 MYTHIC clinical trial of Repare Therapeutics, Inc. ("Repare"). This abstract was published in connection with the 2023 AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, being held October 11-15, 2023 in Boston, MA. The data will be presented by Dr. Timothy A. Yap, The University of Texas MD Anderson Cancer Center at the plenary session of the 2023 AACR-NCI-EORTC on October 13, 2023 at 9:40 a.m. ET.

On October 3, 2023, Repare issued a press release announcing that it will host a conference call and live audio webcast on Friday, October 13, 2023, at 5:30 p.m. ET to discuss the positive, new clinical data of its product candidate lunresertib (RP-6306) in combination with camonsertib (RP-3500/RG6526). The live audio webcast may be accessed through the "Events & Presentations" page in the "Investors and Media" section of Repare's website at ir.reparerx.com. Alternatively, participants may dial (877) 870-4263 (U.S. and Canada) or (412) 317-0790 (international).

The data from Module 1 and 2 of Repare's ongoing Phase 1 MYTHIC clinical trial that will be presented on Repare's conference call and webcast includes a more mature data set of more patients treated at clinically relevant doses than the data included in the abstracts posted by AACR (a September 2023 data cut-off date vs. a June 2023 data cut-off date).

The information contained in this Current Report on Form 8-K is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, except as expressly set forth by specific reference in such filing to this Current Report on Form 8-K.

Cautionary Regarding Forward-Looking Statements

Certain statements in this Current Report on Form 8-K contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and securities laws in Canada. All statements in this Current Report on Form 8-K other than statements of historical facts are "forward-looking statements. These statements may be identified by words such as "aims," "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "intends," "may," "plans," "possible," "potential," "seeks," "will" and variations of these words or similar expressions that are intended to identify forward-looking statements, although not all forward-looking statements contain these words. Forward-looking statements in this press release include, but are not limited to, statements regarding: the safety, efficacy and clinical progress of the combination therapy of lunresertib and camonsertib. These forward-looking statements are based on the Company's expectations and assumptions as of the date of this Current Report on Form 8-K. Each of these forward-looking statements involves risks and uncertainties that could cause the Company's clinical development programs, future results or performance to differ materially from those expressed or implied by the forward-looking statements. Many factors may cause differences between current expectations and actual results, including: success in preclinical testing and earlier clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a product candidate; the impacts of macroeconomic conditions, including the COVID-19 pandemic, the conflict in Ukraine, rising inflation, and uncertain credit and financial markets on the Company's business, clinical trials and financial position; unexpected safety or efficacy data observed during preclinical studies or clinical trials; clinical trial site activation or enrollment rates that are lower than expected; changes in expected or existing competition; changes in the regulatory environment; the uncertainties and timing of the regulatory approval process; and unexpected litigation or other disputes. Other factors that may cause the Company's actual results to differ from those expressed or implied in the forward-looking statements in this press release are identified in the section titled "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2022 filed with the Securities and Exchange Commission ("SEC") and the Québec Autorité des Marchés Financiers ("AMF") on February 28, 2023, and its other documents subsequently filed with or furnished to the SEC and AMF including the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023 filed with the SEC on August 9, 2023. The Company expressly disclaims any obligation to update any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise, except as otherwise required by law.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

REPARE THERAPEUTICS INC.

By: /s/ Lloyd M. Segal
Lloyd M. Segal
President and Chief Executive Officer

Dated: October 6, 2023