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): January 9, 2025

Repare Therapeutics Inc.

(Exact Name of Registrant as Specified in Its Charter)

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

7171 Frederick-Banting, Building 2 Suite 270 St-Laurent, Québec, Canada (Address of Principal Executive Offices)

H4S 1Z9 (Zip Code)

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

Not Applicable

(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 \Box

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. \Box

Item 2.02. Results of Operations and Financial Condition.

On January 9, 2025, Repare Therapeutics Inc. (the "Company") announced that its preliminary unaudited cash, cash equivalents and marketable securities as of December 31, 2024 was approximately \$153 million.

The Company's audited consolidated financial statements at and for the year ended December 31, 2024 are not yet available. As a result, the financial information described in this Item 2.02 is preliminary and unaudited, and represents management's estimate as of the date of this Current Report on Form 8-K, and is subject to completion of the Company's financial closing procedures for the fourth quarter and fiscal year ended December 31, 2024. These preliminary results may materially differ from the actual results that will be reflected in the Company's audited consolidated financial statements when they are completed and publicly disclosed. The Company's independent registered public accounting firm has not conducted an audit or review of, and does not express an opinion or any other form of assurance with respect to, the Company's preliminary results.

The financial information presented in this Item 2.02 does not present all necessary information for a complete understanding of the Company's financial condition as of December 31, 2024, or the Company's results of operations for the year ended December 31, 2024. This preliminary financial data should not be viewed as a substitute for full financial statements for the year ended December 31, 2024 prepared in accordance with U.S. GAAP.

The information contained in Item 2.02 of this Current Report on Form 8-K 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 liabilities of that section, and shall not be deemed incorporated by reference into any of the Company's filings under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Item 7.01 Regulation FD Disclosure.

On January 9, 2025, the Company issued a press release announcing a re-alignment of resources and a re-prioritization of its clinical portfolio to focus on the continued advancement of its Phase 1 clinical programs, RP-1664 and RP-3467, along with an update to its cash position and runway guidance. The Company expects that the consequent savings of its proposed plan to await late-stage clinical funding combined with planned future cost and headcount reductions will extend the Company's cash runway into mid-2027. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information contained in Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, and shall not be deemed incorporated by reference into any of the Company's filings under the Securities Act or the Exchange Act, whether made before or after the date hereof, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Cautionary Note Regarding Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, and the securities laws of Canada. All statements in this Current Report on Form 8-K other than statements of historical fact could be deemed forward looking including, but not limited to, statements regarding the Company's current business plans and objectives; the expected cost-savings from the proposed streamlined operations which include future cost and headcount reductions; and the estimated extended cash runway post-cost reductions. Words such as "plans," "expects," "will," "shall," "anticipates," "continue," "expand," "advance," "believes," "guidance," "target," "may," "remain," "project," "outlook," "intend," "estimate," "could," should," and other words and terms of similar meaning and expression are intended to identify forward-looking statements, although not all forward-looking statements contain such terms. Forward-looking statements are based on management's current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: the Company's ability to successfully implement the proposed cost-cutting measures; the impact of the cost-reduction measures on the Company's business; the effect of the announcement of a future headcount reduction on the ability of the Company to retain and hire key personnel; risks associated with the disruption of management's attention from ongoing business operations due to the resource re-alignment and clinical portfolio reprioritization; and the risk of litigation and/or regulatory actions related to the proposed resource re-alignment. Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. For a discussion of other risks and uncertainties, and other important factors, any of which could cause the Company's actual results to differ from those contained in the forward-looking statements, see the section titled "Risk Factors" in the Company's Quarterly Report on Form 10-Q filed with the SEC and the Québec Autorité des Marchés Financiers on November 7, 2024, as updated by the Company's subsequent filings with the Securities and Exchange Commission. All information in this Current Report on Form 8-K is as of the date of the release, and the Company undertakes no duty to update this information or to publicly announce the results of any revisions to any of such statements to reflect future events or developments, except as required by law.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release dated January 9, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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 January 10, 2025



Repare Therapeutics Announces Portfolio Re-Prioritization, Partnering Initiatives and Cost Reductions

Realigning resources to extend runway to mid-2027

Focus on clinical development of RP-1664 (PLK4 inhibitor) and RP-3467 (Polq ATPase inhibitor), with initial clinical readouts expected beginning in Q3 2025

Exploring partnerships for continued development of Lunre+Camo and other assets

CAMBRIDGE, Mass. & MONTREAL—(BUSINESS WIRE)—Jan. 9, 2025—Repare Therapeutics Inc. ("Repare" or the "Company") (Nasdaq: RPTX), a leading clinical-stage precision oncology company, today announced a re-alignment of resources and a re-prioritization of its clinical portfolio to focus on the continued advancement of its Phase 1 clinical programs, RP-1664 (PLK4 inhibitor) and RP-3467 (Polq ATPase inhibitor). Repare also announced its intention to seek partnering opportunities across its portfolio, including for lunresertib and camonsertib ("Lunre+Camo") prior to any start of pivotal development. The consequent savings of late-stage clinical funding combined with planned cost and headcount reductions are expected to extend Repare's cash runway into mid-2027.

"While Lunre+Camo demonstrated positive results from our Phase 1 clinical trial, after careful consideration we have decided to progress this program into pivotal trials contingent on securing a strategic partner to fund further development. We are focused on achieving near-term inflection points for our Phase 1 clinical assets, RP-1664 and RP-3467, both of which have the potential to address significant unmet patient needs and deliver important catalysts in 2025," said Lloyd M. Segal, President and Chief Executive Officer of Repare. "Combined with other initiatives, these changes, which we will implement later this quarter, provide the foundation for meaningful value creation."

Recent Pipeline Progress & Upcoming Milestones of Prioritized Clinical Programs:

RP-1664: First-in-class, highly selective, oral inhibitor of PLK4

Repare is evaluating RP-1664 as a monotherapy in the Phase 1 LIONS clinical trial in adult and adolescent patients with TRIM37-high solid tumors.

Upcoming Expected Milestones:

- Q3 2025: Initiation of a Phase 1/2 expansion trial in pediatric neuroblastoma
- Q4 2025: Initial topline safety, tolerability and early efficacy data from the LIONS trial
- Mid-2026: Trial completion, final trial readout for proof-of-concept from the LIONS trial

RP-3467: Potential best-in-class Polq ATPase inhibitor

Repare is dosing patients in the Phase 1 POLAR clinical trial evaluating RP-3467 alone and in combination with the poly-ADP ribose polymerase (PARP) inhibitor, olaparib. This trial is enrolling patients with locally advanced or metastatic epithelial ovarian cancer, metastatic breast cancer, metastatic castration-resistant prostate cancer, or pancreatic adenocarcinoma.



Upcoming Expected Milestones:

• Q3 2025: Topline safety, tolerability and early efficacy data from the POLAR trial in monotherapy and in combination with olaparib.

Lunresertib and Camonsertib

Repare recently reported positive efficacy and safety data from the Phase 1 MYTHIC gynecologic expansion clinical trial evaluating the combination of lunresertib and camonsertib (Lunre+Camo) at the recommended Phase 2 dose (RP2D) in patients with endometrial cancer (EC) and platinum-resistant ovarian cancer (PROC). Nearly half of patients with gynecologic cancers maintained progression-free survival (PFS) at 24 weeks, comparing favorably to PFS for current standard of care. Repare intends to seek partnering opportunities for this program as a condition to advancing the program into planned and regulatory-supported pivotal development.

Repare is currently evaluating lunresertib in combination with Debio 0123, a highly selective, brain-penetrant, clinical WEE1 inhibitor, in patients with advanced solid tumors harboring *CCNE1* amplification or *FBXW7* or *PPP2R1A* deleterious alterations as part of an ongoing 50/50 cost sharing collaboration with Debiopharm.

The Company will not continue to develop lunresertib or camonsertib in other studies, including the ongoing camonsertib non-small cell lung cancer expansion study, absent securing a partnership with a development partner.

Upcoming Expected Milestone:

• Q2 2025: Enrollment completion of MYTHIC trial evaluating lunresertib in combination with Debio 0123 (WEE1 inhibitor)

Cash Position and Financial Guidance:

Repare ended 2024 with approximately \$153 million in cash, cash equivalents and marketable securities, which is anticipated with the implementation of the cost-saving measures announced above to fund the Company's streamlined operations into mid-2027.

About Repare Therapeutics Inc.

Repare Therapeutics is a leading clinical-stage precision oncology company enabled by its proprietary synthetic lethality approach to the discovery and development of novel therapeutics. The Company utilizes its genome-wide, CRISPR-enabled SNIPRx[®] platform to systematically discover and develop highly targeted cancer therapies focused on genomic instability, including DNA damage repair. The Company's clinical-stage pipeline includes RP-1664, a Phase 1 PLK4 inhibitor; RP-3467, a Phase 1 Polq ATPase inhibitor; and lunresertib, a PKMYT1 inhibitor, and camonsertib, a potential leading ATR inhibitor. For more information, please visit reparerx.com and follow @Reparerx on X (formerly Twitter) and LinkedIn.



Forward-Looking Statements

This press release 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 press release 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 Company's plans for re-prioritization of its portfolio and the implementation of other cost saving measures, and the expected impact of such actions; the Company's preliminary unaudited balance of cash, cash equivalents and marketable securities as of the end of 2024 and the Company's anticipated cash runway; the Company's plans to secure a partner to fund further clinical development of camonsertib and lunresertib; the potential, tolerability, efficacy and clinical progress of the Company's product candidates; and the design, objectives, initiation, timing, progress and results of current and future preclinical studies and clinical trials of the Company's product candidates. These forward-looking statements are based on the Company's expectations and assumptions as of the date of this press release. 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: the potential that 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 conflict in Ukraine and the conflict in the Middle East, fluctuations in 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; the Company's ability to realize the benefits of its collaboration and license agreements; 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 Quarterly Report on Form 10-Q for the quarter ended September 30, 2024 filed with the Securities and Exchange Commission ("SEC") and the Québec Autorité des Marchés Financiers ("AMF") on November 7, 2024. 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. For more information, please visit reparerx.com and follow Repare on X (formerly Twitter) at @RepareRx and on LinkedIn at https://www.linkedin.com/company/repare-therapeutics/.



Preliminary Financial Information

Repare's audited consolidated financial statements at and for the year ended December 31, 2024 are not yet available. As a result, the financial information described in this press release is preliminary and unaudited, represents management's estimate as of the date hereof and is subject to completion of Repare's financial closing procedures for the fourth quarter and fiscal year ended December 31, 2024. This preliminary financial information may materially differ from the actual results that will be reflected in Repare's audited consolidated financial statements when such financial statements are completed and publicly disclosed. Repare's independent registered public accounting firm has not conducted an audit or review of, and does not express an opinion or any other form of assurance with respect to, Repare's preliminary results.

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