
**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): March 03, 2025

Repare Therapeutics Inc.

(Exact name of Registrant as Specified in Its Charter)

Quebec
(State or Other Jurisdiction
of Incorporation)

001-39335
(Commission File Number)

Not applicable
(IRS Employer
Identification No.)

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

H4S 1Z9
(Zip Code)

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

(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(s)	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 2.02 Results of Operations and Financial Condition.

On March 3, 2025, Repare Therapeutics Inc. (the "Company") issued a press release announcing its recent business highlights and financial results for the three and twelve months ended December 31, 2024. A copy of the press release is furnished hereto as Exhibit 99.1 and is incorporated herein by reference.

The information in this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, 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 liabilities of that section. The information contained herein and in the accompanying exhibit is not incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, 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 9.01 Financial Statements and Exhibits.

Exhibit No.	Description
99.1	Press Release dated March 3, 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.

Date: March 3, 2025

By: /s/ Lloyd M. Segal

Lloyd M. Segal

President and Chief Executive Officer

Repare Therapeutics Provides Business and Clinical Update and Reports Fourth Quarter and Full Year 2024 Financial Results

Initial clinical readout from Phase 1 RP-3467 (Pol θ ATPase/helicase inhibitor) POLAR trial expected in Q3 2025

Initial clinical readout from Phase 1 RP-1664 (PLK4 inhibitor) LIONS trial expected in Q4 2025

Company reducing its workforce by approximately 75%

\$152.8 million in cash and cash equivalents and marketable securities provides runway to late-2027

Exploring partnerships across portfolio, including for Lunre+Camo

CAMBRIDGE, Mass. & MONTREAL (BUSINESS WIRE)—March 3, 2025— Repare Therapeutics Inc. (“Repare” or the “Company”) (Nasdaq: RPTX), a clinical-stage precision oncology company, today reported financial results for the fourth quarter and full year ended December 31, 2024.

“Our recently implemented re-structuring and the re-prioritization of our clinical portfolio meaningfully extends our cash runway into late 2027. We are now focused on three ongoing Phase 1 clinical trials with readouts expected in 2025: the LIONS trial evaluating our RP-1664 PLK4 inhibitor; the POLAR trial evaluating our RP-3467 Pol θ ATPase inhibitor; and our ongoing MYTHIC trial evaluating lunresertib in combination with Debiopharm's WEE1 inhibitor, Debio 0123,” said Lloyd M. Segal, President and Chief Executive Officer of Repare. “Our progress with RP-3467 Pol θ is particularly promising. We believe we are leading the field with helicase Pol θ - PARPi clinical combinations and look forward to sharing initial data by Q3 this year.”

Fourth Quarter 2024 and Recent Portfolio Highlights:

- **RP-3467: Potential best-in-class, oral Pol θ ATPase/helicase inhibitor**
 - Repare initiated the Phase 1 clinical trial of RP-3467 (POLAR) in the fourth quarter of 2024, dosing patients alone and in combination with the poly-ADP ribose polymerase (PARP) inhibitor, olaparib. The POLAR clinical trial is a multicenter, open-label, dose-escalation Phase 1 clinical trial designed to investigate the safety, pharmacokinetics, pharmacodynamics, and preliminary clinical activity of RP-3467 alone or in combination with olaparib in adults 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.
- **RP-1664: First-in-class, oral selective PLK4 inhibitor**
 - Repare is currently evaluating RP-1664 as a monotherapy in the Phase 1 LIONS clinical trial in adult and adolescent patients with TRIM37-high solid tumors. The LIONS clinical trial is a first-in-human,

multicenter, open-label Phase 1 clinical trial designed to investigate safety, pharmacokinetics, pharmacodynamics and the preliminary efficacy of RP-1664.

▪ *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 and final trial readout of proof-of-concept from the LIONS trial

▪ **Lunresertib (RP-6306) in combination with Debio 0123**

- Repare is 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.
- *Upcoming expected milestones:*
 - **Q2 2025:** Enrollment completion of MYTHIC trial evaluating lunresertib in combination with DEBIO 0123 (WEE1 inhibitor).

▪ **Lunresertib (RP-6306) and Camonsertib (RP-3500)**

- Repare 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) in December 2024. Nearly half of patients with gynecologic cancers in the trial 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 further advancement of the program into pivotal development and will not continue to develop lunresertib or camonsertib in other studies.

▪ **Other Highlights**

- Repare 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 and RP-3467. In connection with the re-alignment, the Company is reducing its workforce by approximately 75% to extend its cash runway into late-2027.

Fourth Quarter and Full Year 2024 Financial Results:

- **Cash, cash equivalents and marketable securities:** Cash, cash equivalents and marketable securities as of December 31, 2024 were \$152.8 million, as compared to \$223.6 million as of December 31, 2023. The Company believes that its cash, cash equivalents, and marketable securities, along with the expected cost-savings from the re-alignment, are sufficient to fund its current operational plans into late-2027.
 - **Revenue from collaboration agreements:** Revenue from collaboration agreements was nil and \$53.5 million for the three- and twelve-month periods ended December 31, 2024, respectively, as compared to \$13.0 million and \$51.1 million for the three- and twelve-month periods ended December 31, 2023, respectively.
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- **Research and development expenses, net of tax credits (Net R&D):** Net R&D expenses were \$24.5 million and \$115.9 million for the three- and twelve-month periods ended December 31, 2024, respectively, as compared to \$35.3 million and \$133.6 million for the three- and twelve-month periods ended December 31, 2023, respectively.
- **General and administrative (G&A) expenses:** G&A expenses were \$6.3 million and \$29.7 million for the three- and twelve-month periods ended December 31, 2024, respectively, as compared to \$8.6 million and \$33.8 million for the three- and twelve-month periods ended December 31, 2023, respectively.
- **Net loss:** Net loss was \$28.7 million, or \$0.67 per share, and \$84.7 million, or \$2.00 per share, in the three- and twelve-month periods ended December 31, 2024, respectively, and \$28.0 million, or \$0.67 per share, and \$93.8 million, or \$2.23 per share, in the three- and twelve-month periods ended December 31, 2023, respectively.

About Repare Therapeutics Inc.

Repare Therapeutics is a 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 Polθ ATPase inhibitor; and lunresertib, a PKMYT1 inhibitor. For more information, please visit www.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 anticipated cash runway; the design, objectives, initiation, timing, progress and results of current and future preclinical studies and clinical trials of the Company's product candidates; the Company's plans to seek a partner to fund further clinical development of camonsertib, lunresertib and other assets; the estimated amounts and timing of close-out costs associated with the suspension of its Phase 1 MYTHIC gynecologic expansion trial evaluating Lunre+Camo; and the potential, tolerability, efficacy and clinical progress 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 Annual Report on Form 10-K for the year ended December 31, 2024 filed with the Securities and Exchange Commission ("SEC") and the Québec Autorité des Marchés Financiers ("AMF") on March 3, 2025. 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](https://twitter.com/RepareRx) and on LinkedIn at <https://www.linkedin.com/company/repare-therapeutics/>.

Repare Therapeutics Inc.
Consolidated Balance Sheets
(Unaudited)
(Amounts in thousands of U.S. dollars, except share data)

	As of December 31,	
	2024	2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 84,717	\$ 111,268
Marketable securities	68,074	112,359
Income tax receivable	10,600	10,813
Other current receivables	1,746	4,499
Prepaid expenses	6,012	4,749
Total current assets	171,149	243,688
Property and equipment, net	2,294	4,215
Operating lease right-of-use assets	1,924	3,326
Income tax receivable	960	2,276
Other assets	179	396
TOTAL ASSETS	\$ 176,506	\$ 253,901
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 3,623	\$ 2,400
Accrued expenses and other current liabilities	19,819	24,057
Operating lease liabilities, current portion	1,845	2,400
Deferred revenue, current portion	—	10,222
Total current liabilities	25,287	39,079
Operating lease liabilities, net of current portion	88	1,010
Deferred revenue, net of current portion	—	1,730
TOTAL LIABILITIES	25,375	41,819
Commitments and Contingencies		
SHAREHOLDERS' EQUITY:		
Preferred shares, no par value per share; unlimited shares authorized as of December 31, 2024 and December 31, 2023; 0 shares issued and outstanding as of December 31, 2024 and December 31, 2023	—	—
Common shares, no par value per share; unlimited shares authorized as of December 31, 2024 and December 31, 2023; 42,510,708 and 42,176,041 shares issued and outstanding as of December 31, 2024 and December 31, 2023, respectively	486,674	483,350
Warrants	10	—
Additional paid-in capital	82,191	61,813
Accumulated other comprehensive income	54	28
Accumulated deficit	(417,798)	(333,109)
TOTAL SHAREHOLDERS' EQUITY	151,131	212,082
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 176,506	\$ 253,901

Repare Therapeutics Inc.
Consolidated Statements of Operations
(Unaudited)
(Amounts in thousands of U.S. dollars, except share and per share data)

	Year Ended December 31,	
	2024	2023
Revenue:		
Collaboration agreements	\$ 53,477	\$ 51,133
Operating expenses:		
Research and development, net of tax credits	115,941	133,593
General and administrative	29,680	33,764
Restructuring	1,379	—
Total operating expenses	147,000	167,357
Loss from operations	(93,523)	(116,224)
Other income (expense), net		
Realized and unrealized loss on foreign exchange	(2)	(170)
Interest income	10,391	13,334
Other expense, net	(115)	(119)
Total other income, net	10,274	13,045
Loss before income taxes	(83,249)	(103,179)
Income tax (expense) benefit	(1,440)	9,383
Net loss	\$ (84,689)	\$ (93,796)
Other comprehensive income:		
Unrealized gain on available-for-sale marketable securities	26	456
Total other comprehensive income	\$ 26	\$ 456
Comprehensive loss	\$ (84,663)	\$ (93,340)
Net loss per share attributable to common shareholders—basic and diluted	\$ (2.00)	\$ (2.23)
Weighted-average common shares outstanding—basic and diluted	42,411,085	42,093,293
	Three Months Ended December 31,	
	2024	2023
Key financial highlights:		
Revenues from collaboration agreements	\$ —	\$ 13,047
Research and development, net of tax credits	\$ 24,495	\$ 35,266
General and administrative	\$ 6,301	\$ 8,648
Restructuring	\$ (148)	\$ —
Net loss	\$ (28,671)	\$ (28,030)
Net loss per share attributable to common shareholders—basic and diluted	\$ (0.67)	\$ (0.67)
Weighted-average common shares outstanding—basic and diluted	42,510,708	42,139,096

Investor Relations & Media Contact:

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Source: Repare Therapeutics Inc.
