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): November 10, 2021

Repare Therapeutics Inc.

(Exact name of Registrant as Specified in Its Charter)

001-39335

(Commission File Number)

Quebec
(State or Other Jurisdiction

of Incorporation)

7210 Frederick-Banting, Suite 100 St-Laurent, Quebec, Canada Not applicable

(IRS Employer

Identification No.)

H4S 2A1

	(Address of Principal Executive Offices)	(Zip Code)						
	Registrant's Telephone Number, Including Area Code: 857 412-7018							
	(For	Not Applicable mer Name or Former Address, if Change	d Since Last Report)					
	eck the appropriate box below if the Form 8-K filing iowing provisions:	s intended to simultaneously sa	atisfy the filing obligation of the registrant under any of the					
	Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)							
	Soliciting material pursuant to Rule 14a-12 under the	ne Exchange Act (17 CFR 240.	14a-12)					
	Pre-commencement communications pursuant to Ro	ule 14d-2(b) under the Exchan	ge 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))							
	Securitie	s registered pursuant to Sect	ion 12(b) of the Act:					
		Trading						
	Title of each class	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).							
Em	erging growth company ⊠							
If a	n emerging growth company, indicate by check mark	if the registrant has elected no	t to use the extended transition period for complying with any new					

On November 10, 2021, Repare Therapeutics Inc. (the "Company") issued a press release announcing its recent business highlights and financial results for the three and nine months ended September 30, 2021. A copy of the press release is furnished hereto as Exhibit 99.1 and is incorporated herein by

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.

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.

(d) Exhibits

No.	Description			
99.1	Press Release dated November 10, 2021.			
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 thereunto duly authorized.

REPARE THERAPEUTICS INC.

Date: November 10, 2021 By: /s/ Lloyd M. Segal

Lloyd M. Segal

President and Chief Executive Officer



Repare Therapeutics Provides Business Update and Reports Third Quarter 2021 Financial Results

Oral presentation of initial data from the Phase 1/2 TRESR trial at the AACR-NCI-EORTC conference

Results demonstrated favorable and differentiated safety profile, along with promising early activity, for RP-3500 in patients with a range of synthetic-lethal genomic alterations

Gross Proceeds of \$101.2 Million Raised in Upsized Follow-on Public Offering

Thomas Civik appointed to Board of Directors as new Chairman

Cambridge, MA & Montreal, QC, November 10, 2021 (BUSINESS WIRE)—Repare Therapeutics Inc. ("Repare" or the "Company") (Nasdaq: RPTX), a leading clinical-stage precision oncology company enabled by its proprietary synthetic lethality approach to the discovery and development of novel therapeutics, today reported financial results for the third quarter ended September 30, 2021.

"We are pleased with the progress we've made this quarter in our Phase 1 part of the RP-3500 program, including the comprehensive safety data and emerging evidence of activity from the TRESR study which was part of the featured oral presentation at the AACR-NCI-EORTC conference this year," said Lloyd M. Segal, President and Chief Executive Officer of Repare. "The findings continue to suggest RP-3500 may have broad clinical efficacy in tumors with diverse genetic alterations and provides further clinical proof of concept and validation of our SNIPRx platform. We look forward to providing updates in the future on the potential of RP-3500, both as a monotherapy and in combination with PARP inhibitors."

Third Quarter 2021 Review and Operational Updates:

- Announced initial monotherapy clinical data from Phase 1/2 TRESR study of RP-3500 in patients with solid tumors at the AACR-NCI-EORTC conference
 - Early data showed RP-3500 appears safe and well tolerated. The most common treatment emergent adverse events in any of the 101 patients treated, expectedly, was grade 1-2 anemia, with only 21.8% of all patients experiencing Grade 3 anemia (no Grade 4). There were no discontinuations related to RP-3500 emergent adverse events and dose interruptions, and reductions or red blood cell transfusions were infrequent on the recommended 3 days on/4 days off weekly regimen.
 - Recommended Phase 2 dose and schedule for further monotherapy RP-3500 evaluation was determined to be 160mg, taken weekly for 3 days on and 4 days off. This schedule assures repeated weekly exposure to RP-3500 at an efficacious dose. The Grade 3 anemia rate at this schedule overall was only 14.5%.

- Antitumor activity, defined as RECIST based objective responses, was observed in patients with tumors harboring SNIPRX predicted genomic alternations at doses >100mg (ATM, CDK12, BRCA1, BRCA2, RAD51C), across multiple tumor types and included patients after PARP inhibitor failure. Meaningful clinical benefit was observed in 49% of 69 patients with available scans. Those include 12 patients with tumor responses per established international efficacy criteria, 14 patients with ongoing stable disease for at least 16 weeks and an additional 8 patients with stable disease who only had two radiological evaluations, but had demonstrated significant decreases in tumor markers or initial tumor shrinkage of less than 30%. Promising deep molecular responses in circulating tumor DNA (ctDNA) for tumors with STEP² genomic alterations were observed in a subset of patients available for serial ctDNA analysis.
- o Final readouts from patients enrolled in the monotherapy arm of the TRESR trial, as well as initial data from the combination arm testing RP-3500 together with PARP inhibitors, are expected in 2022.

☐ Raised Gross Proceeds of \$101.2 Million in Upsized Follow-on Public Offering

o In November 2021, the Company announced the closing of an upsized unwritten follow-on public offering yielding aggregate gross proceeds of approximately \$101.2 million, or net proceeds of approximately \$93.9 million, after deducting underwriting commissions and estimated offering expenses of \$1.2 million payable by us. All of the shares in the offering were offered by Repare Therapeutics.

☐ Appointed Thomas Civik to Board of Directors as new Chairman

- o In September 2021, the Company appointed Thomas Civik to its Board of Directors as its Chairman. He replaced Jerel Davis, Ph.D., who remains a Board member.
- o Mr. Civik was most recently President and CEO of Five Prime Therapeutics until its \$1.9 billion acquisition by Amgen in April 2021. He has over 25 years of leadership and commercial experience at various companies including Foundation Medicine and Genentech.

Achieved \$0.9 million (¥100 million) research trigger pursuant to the terms of its research services, license and collaboration agreement with Ono Pharmaceutical Co., Ltd

On October 13, 2021, upon the occurrence of a specified research trigger, the Company became eligible to receive a portion, amounting to ¥100 million (\$0.9 million), of the research service payments provided for in its research services, license and collaboration agreement with Ono Pharmaceutical Co., Ltd., or Ono, ("Ono Agreement") for the research of potential product candidates targeting Polθ. Furthermore, on October 29, the Company and Ono entered into an amendment to the Ono Agreement whereby the Research Term, as defined in the Ono Agreement, was extended by one year.

Third Quarter 2021 Financial Results:

Cash and cash equivalents, restricted cash and marketable securities: Cash and cash equivalents, restricted cash
and marketable securities as of September 30, 2021 were \$268.2 million, exclusive of the proceeds from the follow-on
public offering.

Ц	\$62.1 million for the three- and nine-month periods ended September 30, 2021, respectively, as compared to \$10.1 million and \$27.7 million for the three- and nine-month periods ended September 30, 2020, respectively. The increase in R&D expenses for the three and nine-month periods were primarily due to increases in development costs related to the Company's RP-3500 and RP-6306 programs, as well as increases in personnel related expenses, including share-based compensation.
	General and administrative (G&A) expenses: G&A expenses were \$6.6 million and \$18.6 million for the three and nine-month periods ended September 30, 2021, respectively, as compared to \$4.0 million and \$9.6 million for the three and nine-month periods ended September 30, 2020, respectively. The increase in G&A expenses for the three and six-month periods were due to personnel related costs, including share-based compensation, and D&O insurance which increased as a result of the Company's IPO in June 2020.
	Net loss: Net loss was \$30.9 million, or \$0.83 per share and \$78.6 million, or \$2.12 per share, in the three and ninemonth periods ended September 30, 2021, respectively, and \$13.8 million, or \$0.37 per share and \$38.2 million, or \$2.63 per share in the three and nine-month periods ended September 30, 2020, respectively.

About Repare Therapeutics' SNIPRx® Platform

Repare's SNIPRx® platform is a genome-wide CRISPR-based screening approach that utilizes proprietary isogenic cell lines to identify novel and known synthetic lethal gene pairs and the corresponding patients who are most likely to benefit from the Company's therapies based on the genetic profile of their tumors. Repare's platform enables the development of precision therapeutics in patients whose tumors contain one or more genomic alterations identified by SNIPRx® screening, in order to selectively target those tumors in patients most likely to achieve clinical benefit from resulting product candidates.

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 pipeline includes its lead product candidate RP-3500, a potential leading ATR inhibitor currently in Phase 1/2 clinical development, its second clinical candidate, RP-6306, a PKMYT1 inhibitor currently in Phase 1 clinical development, a Pol θ inhibitor program, as well as eight other early-stage, pre-clinical programs. For more information, please visit reparerx.com.

SNIPRx® is a registered trademark of Repare Therapeutics Inc.

Forward-Looking Statement

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. 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 clinical development of the Company's pipeline and its research and development programs, including the anticipated timing, anticipated patient enrollment, trial outcomes or associated costs of its clinical trials of RP-3500 and RP-6306; and the Company's ability to advance RP-6306, both as monotherapy and in combination with chemotherapies and other agents, into proof-of-concept trials in 2022. 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 impacts of the COVID-19 pandemic 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 Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 filed with the Securities and Exchange Commission ("SEC") and the Québec Autorité des Marchés Financiers ("AMF") on August 12, 2021, and its other documents subsequently filed with or furnished to the SEC and AMF. 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.

Repare Therapeutics Inc.

Condensed Consolidated Balance Sheets (Unaudited)

(Amounts in thousands of U.S. dollars, except share data)

	Se	As of ptember 30,	As of December 31,		
		2021		2020	
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	\$	260,995	\$	326,184	
Marketable securities		7,194		7,526	
Research and development tax credits receivable		2,317		2,011	
Other receivables		767		4,153	
Prepaid expenses		9,103		6,678	
Total current assets		280,376		346,552	
Property and equipment, net		4,165		3,948	
Restricted cash		_		212	
Operating lease right-of-use assets		7,253		4,674	
Other assets		1,008		288	
Deferred tax assets		2,843		1,412	
TOTAL ASSETS	\$	295,645	\$	357,086	
LIABILITIES AND SHAREHOLDERS' EQUITY					
CURRENT LIABILITIES:					
Accounts payable	\$	1,860	\$	2,251	
Accrued expenses and other current liabilities		11,020		5,975	
Operating lease liability, current portion		1,458		697	
Deferred revenue, current portion		8,925		2,073	
Income tax payable		147		18	
Total current liabilities		23,410		11,014	
Operating lease liability, net of current portion		5,623		3,308	
Deferred revenue, net of current portion		48,359		55,934	
TOTAL LIABILITIES		77,392		70,256	
SHAREHOLDERS' EQUITY					
Preferred shares, no par value per share; unlimited shares authorized as of September 30, 2021 and December 31, 2020, respectively; 0 shares issued and outstanding as of September 30, 2021, and December 31, 2020, respectively				_	
Common shares, no par value per share; unlimited shares authorized as of September 30, 2021 and December 31, 2020; 37,133,938 and 36,902,924 shares issued and outstanding as of September 30, 2021 and December 31, 2020, respectively		385,990		384,313	
Additional paid-in capital		14,239		5,875	
Accumulated deficit					
		(181,976)		(103,358)	
Total shareholders' equity		218,253		286,830	
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$	295,645	\$	357,086	

Repare Therapeutics Inc. Condensed Consolidated Statements of Operations and Comprehensive Loss (Unaudited)

(Amounts in thousands of U.S. dollars, except share and per share data)

		Three Months Ended September 30,			Nine Months September			
		2021		2020		2021		2020
Revenue:								
Collaboration agreements	\$	278	\$	_	\$	723	\$	_
Operating expenses:								
Research and development, net of tax credits		25,361		10,091		62,075		27,674
General and administrative		6,596		3,996		18,574		9,551
Total operating expenses		31,957		14,087		80,649		37,225
Loss from operations		(31,679)		(14,087)		(79,926)		(37,225)
Other income (expense), net			,		,			
Realized and unrealized gain (loss) on foreign exchange		33		290		(92)		(846)
Interest income		53		156		155		156
Other expense		(7)		(4)		(21)		(10)
Total other income (expense), net		79		442		42		(700)
Loss before income taxes		(31,600)		(13,645)		(79,884)		(37,925)
Income tax recovery (expense)		708		(106)		1,266		(229)
Net loss and comprehensive loss	\$	(30,892)	\$	(13,751)	\$	(78,618)	\$	(38,154)
Net loss attributable to common shareholders—basic	<u></u> \$	(30,892)	\$	(13,751)	\$	(78,618)	\$	(38,154)
and diluted	<u> </u>	(30,032)	Ф	(13,731)	Ф	(70,010)	Ф	(30,134)
Net loss per share attributable to common shareholders—basic and diluted	\$	(0.83)	\$	(0.37)	\$	(2.12)	\$	(2.63)
Weighted-average common shares outstanding—basic and diluted		37,122,668		36,756,694		37,026,116		14,486,896

Repare Contact:

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