

**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 4, 2021**

**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.)

**7210 Frederick-Banting, Suite 100**  
**St-Laurent, Québec, Canada**  
(Address of Principal Executive Offices)

**H4S 2A1**  
(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

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 4, 2021, 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, 2020. 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.**

(d) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
99.1	<a href="#">Press Release dated March 4, 2021.</a>

**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: March 4, 2021



## Repare Therapeutics Provides Business Update and Reports Fourth Quarter and Full Year 2020 Financial Results

*Initiated patient recruitment of PARP-inhibitor combination arm of RP-3500 TRESR Phase 1/2 clinical trial*

*Initiated IND-enabling studies for RP-6306, the Company's CCNE-1 synthetic-lethal inhibitor program*

*Phase 1 clinical trial for RP-6306 is anticipated to commence in 2Q 2021, reflecting a further accelerated timeline for clinical trial start*

*Company to host Virtual Investor Day on Thursday, April 8th to detail RP-6306 clinical program and provide perspectives from two distinguished physicians*

**Cambridge, MA & Montreal, QC, March 4, 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 fourth quarter and full year ended December 31, 2020.

"We met or exceeded key business and program milestones in 2020. In the first half, we secured more than \$300 million in new balance sheet capital from our IPO and from the up-front payments associated with our Bristol Myers Squibb collaboration, all of which we believe will accelerate program progress. In the second half, we continued to execute on our strategic goals by successfully launching our Phase 1/2 clinical trial for RP-3500, which is currently enrolling patients. 10 sites have been activated across North America and Europe," said Lloyd M. Segal, President and Chief Executive Officer of Repare. "We continue to advance our discovery platform and have now designated our second clinical program, RP-6306, for which we have initiated IND-enabling studies."

Mr. Segal added: "2021 will be a pivotal year for Repare. We have already expanded the scope of our RP-3500 trial with the initiation of patient recruitment of the PARP-inhibitor combination portion of our study, and by virtue of our execution to-date, we have re-affirmed our expectation to release initial results for the monotherapy portion of the trial in the second half of the year. In addition, we now expect to bring our CCNE1 synthetic lethal target development program, RP-6306, into the clinic in the second quarter of this year, a quarter ahead of previously announced guidance, and look forward to discussing it in more detail during our RP-6306-focused Virtual Investor Day on Thursday, April 8th. Finally, we continue to leverage our proprietary, genome-wide, CRISPR-enabled SNIPRx® platform and are now actively pursuing eight discovery-stage inhibitor programs in addition to other candidates that are part of our ongoing collaboration with Bristol Myers Squibb."

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## 2020 Highlights and 2021 Outlook:

- **Initiated a Phase 1/2 clinical trial evaluating RP-3500 as a monotherapy and in combination with Pfizer's PARPi, talazoparib, in patients with solid tumors.**
    - In July 2020, the Company began dosing in a Phase 1/2 clinical trial of RP-3500, a potent and selective oral small molecule inhibitor of ATR (Ataxia-Telangiectasia and Rad3-related protein kinase) for the treatment of solid tumors in patients with specific genome instability-related genetic alterations, including those in the ATM gene (ataxia telangiectasia mutated kinase).
    - Repare has now activated 10 clinical trial sites across North America and Europe, and is now actively screening patients to evaluate RP-3500 in a combination arm with Pfizer's PARP inhibitor, talazoparib, in addition to monotherapy.
    - Initial results are expected to be reported in the monotherapy arm of the trial in the second half of 2021.
  - **Advanced RP-6306, our CCNE-1 synthetic lethal inhibitor program, into IND enabling studies.**
    - The Company anticipates initiating a Phase 1 clinical trial for RP-6306 in the second quarter of 2021, ahead of its previously announced guidance, and plans to host a Virtual Investor Day on Thursday, April 8, 2021 to further discuss this program.
  - **Advanced the development of our earlier stage discovery programs**
    - Repare is actively pursuing eight discovery pipeline initiatives in addition to its ongoing collaboration with Bristol Myers Squibb. Several of these synthetic lethal discovery targets have progressed into active chemistry programs.
    - The Company is now expected to initiate IND enabling studies in H1 2022 for its third synthetic lethal asset, its Polθ inhibitor program, versus previously announced guidance of H2 2021.
  - **Corporate Updates**
    - In December 2020, the Company was added to the NASDAQ Biotechnology Index® (NASDAQ: ^NBI). Repare's addition to the NBI became effective on Monday, December 21, 2020.
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## Fourth Quarter and Full Year 2020 Financial Results:

- **Cash and cash equivalents, restricted cash and marketable securities:** Cash and cash equivalents, restricted cash and marketable securities as of December 31, 2020 were \$333.9 million.
- **Research and development expenses, net of tax credits (Net R&D):** Net R&D expenses were \$40.1 million and \$21.0 million for the years ended December 31, 2020 and 2019, respectively. The increase in R&D expenses year over year was 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 and certain other R&D expenses.
- **General and administrative (G&A) expenses:** G&A expenses were \$14.3 million and \$5.4 million for the years ended December 31, 2020 and 2019, respectively. The increase in G&A expenses year over year was due to increases in payroll and personnel costs as well as increases in legal, professional and D&O insurance costs, all of which increased as a result of our the Company's recent IPO and transition to a public company.
- **Net loss:** Net loss was \$53.4 million, or \$2.66 per share in the year ended December 31, 2020 and \$27.2 million, or \$17.81 per share, in the year ended December 31, 2019.

## Conference Call Details for RP-6306-focused Virtual Investor Day on Thursday, April 8, 2021

Repare Therapeutics will host a RP-6306-focused Virtual Investor Day on Thursday, April 8, 2021 at 10:30 a.m.ET to discuss RP-6306, a CCNE-1 synthetic lethal inhibitor undergoing IND-enabling studies. The Company anticipates commencing a Phase 1 clinical trial in the second quarter of 2021, a quarter earlier than previously announced guidance. Repare Therapeutics' executive management team will be joined by two distinguished physicians:

- Carol Aghajanian, MD – Chief, Gynecologic Medical Oncology Service, Professor of Medicine, Weill Cornell Medical College, Memorial Sloan Kettering Cancer Center; and
- Timothy Yap, MBBS, PhD, FRCP, Department of Investigational Cancer Therapeutics, Division of Cancer Medicine, MD Anderson Center

To access the conference call, please dial (833) 638-9655 or (602) 585-9856 (international) at least 10 minutes prior to the start time and refer to conference ID 1093819. Presentation slides will be available to download from the Company's website.

## 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

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SNIPRx® screening, in order to selectively target those 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, as well as RP-6306, a CCNE1-SL inhibitor, and a Polθ inhibitor program. For more information, please visit [reparerx.com](http://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 discovery of potential product candidates using SNIPRx® platform; 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 success of the Company's collaborations with Bristol Myers Squibb and Ono Pharmaceuticals, including the development of preclinical assets pursuant to the collaborations. 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 Annual Report on Form 10-K for the year ended December 31, 2020 filed with the Securities and Exchange Commission ("SEC") on March 4, 2021. The Company expressly disclaims any obligation to update any forward-looking statements contained herein, whether as a result of

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any new information, future events, changed circumstances or otherwise, except as otherwise required by law.

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

	As of December 31,	
	2020	2019
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 326,184	\$ 94,797
Marketable securities	7,526	—
Research and development tax credits receivable	2,011	1,080
Other receivables	4,153	1,976
Prepaid expenses	6,678	719
Total current assets	346,552	98,572
Property and equipment, net	3,948	2,390
Restricted cash	212	208
Operating lease right-of-use assets	4,674	1,034
Other assets	288	359
Deferred tax assets	1,412	132
<b>TOTAL ASSETS</b>	<b>\$ 357,086</b>	<b>\$ 102,695</b>
<b>LIABILITIES, CONVERTIBLE PREFERRED SHARES AND SHAREHOLDERS' EQUITY (DEFICIT)</b>		
Current liabilities:		
Accounts payable	\$ 2,251	\$ 2,127
Accrued expenses and other current liabilities	5,975	1,276
Operating lease liabilities, current portion	697	625
Deferred revenue, current portion	2,073	—
Income tax payable	18	218
Total current liabilities	11,014	4,246
Operating lease liabilities, net of current portion	3,308	439
Deferred revenue, net of current portion	55,934	8,142
<b>TOTAL LIABILITIES</b>	<b>70,256</b>	<b>12,827</b>
Series A convertible Preferred Shares, no par value per share; 0 shares and unlimited shares authorized as of December 31, 2020 and 2019, respectively; 0 shares and 11,090,135 shares issued and outstanding as of December 31, 2020 and 2019, respectively; liquidation and redemption value of \$0 and \$52,750 as of December 31, 2020 and 2019, respectively	—	53,749
Series B convertible Preferred Shares, no par value per share; 0 shares and unlimited shares authorized as of December 31, 2020 and 2019, respectively; 0 shares and 10,468,258 shares issued and outstanding as of December 31, 2020 and 2019, respectively; liquidation and redemption value of \$0 and \$82,496 as of December 31, 2020 and 2019, respectively	—	82,248
<b>TOTAL CONVERTIBLE PREFERRED SHARES</b>	<b>—</b>	<b>135,997</b>
<b>SHAREHOLDERS' EQUITY (DEFICIT):</b>		
Preferred shares, no par value per share; unlimited shares authorized and 0 shares authorized as December 31, 2020 and 2019, respectively; 0 shares issued and outstanding as of December 31, 2020, and 2019, respectively	—	—
Common shares, no par value per share; unlimited shares authorized as of December 31, 2020 and 2019; 36,902,924 and 1,528,374 shares issued and outstanding as of December 31, 2020 and 2019, respectively	384,313	1
Additional paid-in capital	5,875	3,811
Accumulated deficit	(103,358)	(49,941)
<b>TOTAL SHAREHOLDERS' EQUITY (DEFICIT)</b>	<b>286,830</b>	<b>(46,129)</b>
<b>TOTAL LIABILITIES, CONVERTIBLE PREFERRED SHARES AND SHAREHOLDERS' EQUITY (DEFICIT)</b>	<b>\$ 357,086</b>	<b>\$ 102,695</b>

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

	<u>Three Months Ended December 31,</u>		<u>Year Ended</u>	<u>December 31,</u>
	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>
<b>Revenue:</b>				
Collaboration agreements	\$ 135	\$ -	\$ 135	\$ -
<b>Operating expenses:</b>				
Research and development, net of tax credits	12,417	6,821	40,091	20,995
General and administrative	4,792	2,024	14,346	5,382
Total operating expenses	17,209	8,845	54,437	26,377
Loss from operations	(17,074)	(8,845)	(54,302)	(26,377)
Other (expense) income, net				0
Realized and unrealized (loss) gain on foreign exchange	181	565	(664)	712
Change in fair value of Series A Preferred Share tranche obligation	—	(13)	—	(1,350)
Interest income	84	—	240	—
Other expense	(6)	(1)	(16)	(6)
Total other income (expense), net	259	551	(440)	(644)
Loss before income taxes	(16,815)	(8,294)	(54,742)	(27,021)
Income tax benefit (expense)	1,554	(37)	1,325	(195)
<b>Net loss and comprehensive loss</b>	<b>\$ (15,261)</b>	<b>\$ (8,331)</b>	<b>\$ (53,417)</b>	<b>\$ (27,216)</b>
Net loss attributable to common shareholders				
—basic and diluted	\$ (15,261)	\$ (8,331)	\$ (53,417)	\$ (27,216)
Net loss per share attributable to common shareholders				
—basic and diluted	\$ (0.41)	\$ (5.45)	\$ (2.66)	\$ (17.81)
Weighted-average common shares outstanding				
—basic and diluted	36,782,807	1,528,374	20,045,602	1,528,374