

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

POST-EFFECTIVE AMENDMENT NO. 3
TO

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

REPARE THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Québec
(State or other jurisdiction of
incorporation or organization)

Not applicable
(I.R.S. Employer
Identification Number)

7210 Frederick-Banting, Suite 100
St-Laurent, Québec, Canada H4S 2A1
(857) 412-7018

(Address, including zip code, and telephone number, including area code of registrant's principal executive offices)

Lloyd M. Segal
Chief Executive Officer
Repare Therapeutics Inc.
1 Broadway, 15th Floor
Cambridge, MA 02142
(857) 412-7018

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Divakar Gupta
Courtney T. Thorne
Cooley LLP
500 Boylston Street, 14th Floor
Boston, MA 02116
(617) 937-2300

Robert Carelli
Jeremy Sculnick
Stikeman Elliott LLP
1155 René-Lévesque Blvd. West
41st Floor
Montréal, Québec, Canada H3B 3V2
(514) 397-3222

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 7(a)(2)(B) of the Securities Act.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

This Post-Effective Amendment No. 3 to the Registration Statement on Form S-3, as previously amended by [Post-Effective Amendment No. 2](#) (File No. 333-257668) (as so amended, the “**Registration Statement**”) of Repare Therapeutics Inc. (the “**Company**”) is being filed for the purpose of replacing the Exhibit 23.1 consent of independent registered public accounting firm (the “**Auditor’s Consent**”) previously filed with the Registration Statement with the Exhibit 23.1 Auditor’s Consent filed herewith. This Post-Effective Amendment No. 3 consists only of the cover page, this explanatory note and Item 16 (Exhibits) of the Registration Statement and does not modify any other part of the Registration Statement.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits.

Exhibit	Description of Document	Incorporation By Reference		
		Form	File No.	Exhibit
1.1*	Form of Underwriting Agreement.			
3.1	Articles of Continuance of Repare Therapeutics Inc.	8-K	001-39335	3.1
3.2	Amended and Restated Bylaws of Repare Therapeutics Inc.	8-K	001-39335	3.2
4.1	Form of Common Share Certificate of the registrant.	S-1/A	333-238822	4.1
4.2*	Specimen Preferred Share Certificate and Form of Certificate of Designation of Preferred Shares			
4.3	Amended and Restated Registration Rights Agreement, by and among the registrant and certain of its shareholders, dated September 3, 2019.	S-1	333-238822	4.2
4.4	Description of Registrant's Securities.	10-K	001-39335	4.4
4.5	Form of Indenture between the Registrant and one or more trustees to be named.	S-3ASR	333-257668	4.5
4.6*	Form of Debt Securities.			
4.7	Form of Common Share Warrant Agreement and Warrant Certificate.	S-3ASR	333-257668	4.7
4.8	Form of Preferred Share Warrant Agreement and Warrant Certificate.	S-3ASR	333-257668	4.8
4.9	Form of Debt Securities Warrant Agreement and Warrant Certificate.	S-3ASR	333-257668	4.9
5.1	Opinion of Stikeman Elliott LLP.	POSASR	333-257668	5.1
5.2	Opinion of Cooley LLP.	POSASR	333-257668	5.2
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm.			
23.2	Consent of Stikeman Elliott LLP (included in Exhibit 5.1).	POSASR	333-257668	23.2
23.3	Consent of Cooley LLP (included in Exhibit 5.2).	POSASR	333-257668	23.3
24.1	Power of Attorney (included on signature page).	S-3ASR	333-257668	24.1
25.1**	Statement of Eligibility of Trustee under the Indenture.			

* To be filed, if applicable, by amendment or by a report filed under the Exchange Act and incorporated herein by reference.

** To be filed, if applicable, in accordance with the requirements of Section 305(b)(2) of the Trust Indenture Act of 1939 and Rule 5b-3 thereunder.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 3 to Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Montréal, Province of Québec, Canada, on March 7, 2022.

REPARE THERAPEUTICS INC.

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

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 3 to Form S-3 has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Lloyd M. Segal</u> Lloyd M. Segal	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	March 7, 2022
<u>/s/ Steve Forte</u> Steve Forte	Chief Financial Officer <i>(Principal Financial Officer and Principal Accounting Officer)</i>	March 7, 2022
<u>/s/ Thomas Civik</u> Thomas Civik	Chairman of the Board of Directors	March 7, 2022
<u>*</u> David Bonita, M.D.	Director	March 7, 2022
<u>/s/ Jerel Davis, Ph.D.</u> Jerel Davis, Ph.D.	Director	March 7, 2022
<u>*</u> Todd Foley	Director	March 7, 2022
<u>*</u> Samarth Kulkarni, Ph.D.	Director	March 7, 2022
<u>*</u> Briggs Morrison, M.D.	Director	March 7, 2022
<u>*</u> Ann D. Rhoads	Director	March 7, 2022
<u>*</u> Carol A. Schafer	Director	March 7, 2022

* By: /s/ Lloyd Segal
Lloyd Segal
Attorney-in-Fact

SIGNATURE OF AUTHORIZED U.S. REPRESENTATIVE OF THE REGISTRANT

Pursuant to the Securities Act, the undersigned, the duly authorized representative in the United States of Repare Therapeutics Inc. has signed this Post-Effective Amendment No. 3 on March 7, 2022.

REPARE THERAPEUTICS USA INC.

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

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” in Post-Effective Amendment No. 2 to the Registration Statement (Form S-3 No. 333-257668) and related Prospectus of Repare Therapeutics Inc. for the registration of common shares, preferred shares, debt securities and warrants, and to the incorporation by reference therein of our reports dated March 1, 2022, with respect to the consolidated financial statements of Repare Therapeutics Inc. and the effectiveness of internal control over financial reporting of Repare Therapeutics Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Montreal, Canada
March 7, 2022