

☐ Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Foley Todd</u>  (Last) (First) (Middle) <u>C/O MPM CAPITAL</u> <u>450 KENDALL STREET</u>  (Street) <u>CAMBRIDGE MA 02142</u>  (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>Repare Therapeutics Inc. [ RPTX ]</u>  3. Date of Earliest Transaction (Month/Day/Year) <u>06/17/2021</u>  4. If Amendment, Date of Original Filed (Month/Day/Year)	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner  Officer (give title below) Other (specify below)  <input checked="" type="checkbox"/> Form filed by One Reporting Person  Form filed by More than One Reporting Person
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Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Shares	06/17/2021		s <sup>(1)</sup>		13,575 <sup>(2)</sup>	D	\$33.78 <sup>(3)</sup>	2,314,665	I	See Footnote <sup>(4)</sup>
Common Shares	06/17/2021		s <sup>(1)</sup>		753 <sup>(5)</sup>	D	\$34.12 <sup>(6)</sup>	2,313,912	I	See Footnote <sup>(7)</sup>
Common Shares	06/18/2021		s <sup>(1)</sup>		2,556 <sup>(8)</sup>	D	\$33.46 <sup>(9)</sup>	2,311,356	I	See Footnote <sup>(10)</sup>
Common Shares	06/18/2021		s <sup>(1)</sup>		1,410 <sup>(11)</sup>	D	\$34.03 <sup>(12)</sup>	2,309,946	I	See Footnote <sup>(13)</sup>

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
						Date Exercisable	Expiration Date					
				Code	V	(A)	(D)	Amount or Number of Shares				

Explanation of Responses:

1. Transaction effected pursuant to a plan established pursuant to Rule 10b5-1 on 3/31/2021.
2. The shares were sold as follows: 13,123 by MPM BioVentures 2014, L.P. ("BV 2014") and 452 by MPM Asset Management Investors BV2014 LLC ("AM BV2014").
3. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$33.06 to \$34.03 inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
4. The shares are held as follows: 2,106,322 by BV 2014, 135,843 by MPM BioVentures 2014(B), L.P. ("BV 2014(B)") and 72,500 by AM BV2014. MPM BioVentures 2014 GP LLC and MPM BioVentures 2014 LLC ("BV LLC") are the direct and indirect general partners of BV 2014 and BV 2014(B). BV LLC is the manager of AM BV2014. Todd Foley is a managing director of BV LLC. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
5. The shares were sold as follows: 728 by BV 2014 and 25 by AM BV2014.
6. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$34.07 to \$34.26 inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
7. The shares are held as follows: 2,105,594 by BV 2014, 135,843 by BV 2014(B) and 72,475 by AM BV2014. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
8. The shares were sold as follows: 2,471 by BV 2014 and 85 by AM BV2014.
9. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$32.95 to \$33.94 inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
10. The shares are held as follows: 2,103,123 by BV 2014, 135,843 by BV 2014(B) and 72,390 by AM BV2014. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
11. The shares were sold as follows: 1,363 by BV 2014 and 47 by AM BV2014.
12. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$32.97 to \$34.14 inclusive. The Reporting Person undertakes to provide to the Issuer, any security holder of the Issuer, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
13. The shares are held as follows: 2,101,760 by BV 2014, 135,843 by BV 2014(B) and 72,343 by AM BV2014. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

Remarks:

/s/ Todd Foley

06/21/2021

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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