Instruction 1(b).

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL 3235-0287 Estimated average burden hours per response: 0.5

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

Name and Address of Reporting Person* Foley Todd						2. Issuer Name and Ticker or Trading Symbol Repare Therapeutics Inc. [RPTX]									all app			10%	Owner
(Last) (First) (Middle) C/O MPM CAPITAL 450 KENDALL STREET					3. Date of Earliest Transaction (Month/Day/Year) 06/14/2021									Office	r (give titl	le Other (s below)		r (specify v)	
(Street) CAMBRIDGE MA 02142 (City) (State) (Zip)				4. If Amendment, Date of Original Filed (Month/Day/Year)									Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person						
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
1. Title of Security (Instr. 3) 2. Transactio Date (Month/Day/Y				ear) i	Execution D			Code (Ir		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 a			5. Amount of Securities Beneficially Owned Follow Reported		s ally ollowing	6. Ownershi Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)	
						Code	v	Amount	(A) or (D)	Price	Tr	Transaction(s) (Instr. 3 and 4)				(111501.4)			
Common Shares 06/14/202					21	ı			S ⁽¹⁾		881(2)	D	\$33.09	(3)	2,330	,330,102			See Footnote ⁽⁴⁾
Common Shares 06/16/202					21	1			S ⁽¹⁾		1,862(5)	D	\$33.33	(6)	2,328,240		I		See Footnote ⁽⁷⁾
	Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																		
Derivative Conversion Date Executi Security or Exercise (Month/Day/Year) if any					nsaction of Deri le (Instr. Secondary (A) of Disport (I		osed) :. 3, 4	Expiration (Month/Da			Amou Secu Unde Deriv Secu	7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		rice of vative urity rr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		10. Ownersh Form: Direct (D or Indirec (I) (Instr.	Beneficial Ownership ct (Instr. 4)	
					Code	v	(A)	(D)	Dat Exe	e ercisable	Expiration e Date	Title	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: 852 by MPM BioVentures 2014, L.P. ("BV 2014") and 29 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 \$32.95 to \$33.57 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: 2,121,245 by BV 2014, 135,843 by MPM BioVentures 2014(B), L.P. ("BV 2014(B)") and 73,014 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: 1,800 by BV 2014 and 62 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 \$32.95 to \$33.66 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: 2,119,445 by BV 2014, 135,843 by BV 2014(B) and 72,952 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

06/16/2021

** 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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.