FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

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

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]								(Che	eck all app	,		Owner	,	
(Last) (First) (Middle) C/O MPM CAPITAL		3. Date of Earliest Transaction (Month/Day/Year) 06/08/2021										Office below	r (give ti	itle Other below)		er (speci w)	ify
450 KENDALL STREET			4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)						
(Street) CAMBRIDGE MA 02:	•											X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City) (State) (Zip))																
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	Exed if an	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			(A) or . 3, 4 and !	5. Amount or Securities Beneficially Owned Following		lly	Form: Direc			
					Code	v	Amo	ount	(A) or (D)	Price		Reported Transaction (Instr. 3 a	on(s)	, , ,			
Common Shares	06/08/2021				S ⁽¹⁾		3,	985 ⁽²⁾	D	\$32.8	(3)	2,354	,065]	I	See Footno	ote ⁽⁴⁾
Common Shares	06/08/2021				S ⁽¹⁾		7,	559 ⁽⁵⁾	D	\$33.41	(6)	2,346	,506]	[See Footno	ote ⁽⁷⁾
Common Shares	06/09/2021				S ⁽¹⁾		4,	785 ⁽⁸⁾	D	D \$34.42		2,341,721		I		See Footno	ote ⁽¹⁰⁾
Common Shares	06/09/2021				S ⁽¹⁾		10,	,738(11)	D	D \$34.79		2,330,983		I		See Footno	ote ⁽¹³⁾
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																	
Derivative Conversion Date Security or Exercise (Month/Day/Year) in	ecution Date, iny		ransaction		- 1	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Ins 3 and 4)		8. Price of Derivative Security (Instr. 5)		9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		10. Owners Form: Direct (I or Indirect)	hip of I Be O) Ow ect (In:	. Nature Indirect eneficial wnership istr. 4)	
Evaluation of Donnarco		Code	v	(A)		Date Exercis	able	Expiratio Date	n Title	Amoun or Numbe of Shares	r						

- 1. Transaction effected pursuant to a plan established pursuant to Rule 10b5-1 on 3/31/2021.
- 2. The shares were sold as follows: 3,852 by MPM BioVentures 2014, L.P. ("BV 2014") and 133 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 \$32.16 to \$33.145 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: 2,144,411 by BV 2014, 135,843 by MPM BioVentures 2014(B), L.P. ("BV 2014(B)") and 73,811 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: 7,308 by BV 2014 and 251 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 \$33.16 to \$33.93 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: 2,137,103 by BV 2014, 135,843 by BV 2014(B) and 73,560 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: 4,627 by BV 2014 and 158 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 \$33.66 to \$34.65 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: 2,132,476 by BV 2014, 135,843 by BV 2014(B) and 73,402 by AM BV2014. The Reporting Person disclaims beneficial ownership of the securities except to the extent
- 11. The shares were sold as follows: 10,379 by BV 2014 and 359 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 \$34.69 to \$35.00 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: 2,122,097 by BV 2014, 135,843 by BV 2014(B) and 73,043 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

06/10/2021

** 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.