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

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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 ar	2. Issuer Name and Ticker or Trading Symbol Repare Therapeutics Inc. [RPTX]									(Check all applicable) X Director			orting Person(s) to Issuer		ó Owner					
(Last)	⁄liddle)	3. Date of Earliest Transaction (Month/Day/Year) 06/21/2021										below	er (give ti v)	tie	Oth belo	er (specify ow)				
450 KENDALL STREET					4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)						
(Street)	2142										2				-	erson Reporting				
(City) (State) (Zip)																				
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 1. Title of Security (Instr. 3) 2. Transaction 2. Deemed 3. 4. Securities Acquired (A) or 5. Amount of 6. Ownership 7. Nature of																			
1. Title of Security (Instr. 3)			2. Transaction Date (Month/Day/Yea	Exe ur) if a	Execution Date, if any (Month/Day/Year)		Transaction Code (Instr. 8)		Disposed Of (D) (In		Acquire (D) (Inst	Instr. 3, 4 and 5)		Securities Beneficially Owned Following		Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership (Instr. 4)		
							Code	v	Amo	unt	(A) or (D)	Price		Reported Transacti (Instr. 3 a	on(s)			,,		
Common	Shares	06/21/2021				S ⁽¹⁾		2,5	556 ⁽²⁾	D	\$33.80	(3)	2,307	7,390		[See Footnote ⁽⁴⁾			
Common	Shares	06/21/2021				S ⁽¹⁾		14,0	006 ⁽⁵⁾	D	D \$34.63		2,293,384				See Footnote ⁽⁷⁾			
Common	Shares	06/22/2021				S ⁽¹⁾		1,4	186 ⁽⁸⁾	D	D \$33.36		2,291,898				See Footnote ⁽¹⁰⁾			
Common	Shares	06/22/2021				S ⁽¹⁾		189(11)		D	\$34.09(12)		2,291,709		I		See Footnote ⁽¹³⁾			
Common Shares			06/23/2021				S ⁽¹⁾		62	622 ⁽¹⁴⁾		\$32.98(15)		2,291,087		I		See Footnote ⁽¹⁶⁾		
		Tal	ole II - Derivati (e.g., pu											/ Owned	d					
Derivative Conversion Date Execution Security or Exercise (Month/Day/Year) if any			3A. Deemed Execution Date,	4. Transa	saction of Derivati Securit (A) or Dispos of (D) (Instr. and 5)		ber 6. Date E Expiration (Month/I		exercisable and		7. T Am Sec Und Der Sec	itle and ount of curities derlying ivative urity (Instr. nd 4)	8. Price of Derivativ Security (Instr. 5)				10. Owners Form: Direct (I or Indire (I) (Instr	Beneficial Ownership ect (Instr. 4)		
				Code	v	(A) (ate Kercisa		Expiratio Date	n Titl	Amount or Number of Shares	r							
Explanatio	n of Respon	ses:																		

- $1. \ Transaction \ effected \ pursuant \ to \ a \ plan \ established \ pursuant \ to \ Rule \ 10b5-1 \ on \ 3/31/2021.$
- 2. The shares were sold as follows: 2,471 by MPM BioVentures 2014, L.P. ("BV 2014") and 85 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 \$33.33 to \$34.30 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: 2,099,289 by BV 2014, 135,843 by MPM BioVentures 2014(B), L.P. ("BV 2014(B)") and 72,258 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: 13,540 by BV 2014 and 466 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 \$34.39 to \$34.87 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: 2,085,749 by BV 2014, 135,843 by BV 2014(B) and 71,792 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: 1,436 by BV 2014 and 50 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 \$33.93 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
- 10. The shares are held as follows: 2,084,313 by BV 2014, 135,843 by BV 2014(B) and 71,742 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: 183 by BV 2014 6 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 \$33.98 to \$34.16 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: 2,084,130 by BV 2014, 135,843 by BV 2014(B) and 71,736 by AM BV2014. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

14. The shares were sold as follows: 601 by BV 2014 and 21 by AM BV2014.

15. 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 \$33.03 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.

16. The shares are held as follows: 2,083,529 by BV 2014, 135,843 by BV 2014(B) and 71,715 by AM BV2014. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

Remarks:

<u>/s/ Todd Foley</u>

06/23/2021

** 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.