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

1. Name and A		2. Issuer Name and Ticker or Trading Symbol Repare Therapeutics Inc. [RPTX]							Relationship of Reporting Person(s) to Issuer (Check all applicable) Director X 10% Owner								
(Last) (First) (Middle) C/O MPM CAPITAL 450 KENDALL STREET				06/1	3. Date of Earliest Transaction (Month/Day/Year) 06/14/2021 4. If Amendment, Date of Original Filed (Month/Day/Year)							Officer (give title Other (specify below) below) 6. Individual or Joint/Group Filing (Check Applicable					
(Street) CAMBRIDGE MA 02142 (City) (State) (Zip)				,	Anterioriti, Date of Original Filed (World Day/Teal)							X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City)	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)				n 2A. Deem Execution		ned n Date,	3. Trai	nsaction de (Instr.	4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a		d (A) or	5. Amount of Securities Beneficially Owned Following		6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)		7. Nature of Indirect Beneficial Ownership	
					Cod	de V	Amount	(A) or (D)	Price	Transact	Reported Transaction(s) (Instr. 3 and 4)			(Instr. 4)			
Common Sh	06/14/20	06/14/2021				1)	2,000(2)	D	\$33.09	4,080,995		I		See Footnote ⁽⁴⁾			
Common Shares			06/16/20	2021				1)	4,227 ⁽⁵⁾	D	\$33.33(4,07	6,768		I	See Footnote ⁽⁷⁾	
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																	
Security or I (Instr. 3) Pri De	ive Conversion Date Execution Date y or Exercise (Month/Day/Year) if any		Execution Date,	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		i. Date Ex Expiration Month/Da		7. Titl Amou Secur Unde Deriv Secur 3 and	int of rities rlying ative rity (Instr.	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		10. Ownersh Form: Direct (D or Indire (I) (Instr.	Beneficial Ownership ct (Instr. 4)	
Explanation of	f.Daana			Code	v	(A) (I		Date Exercisab	Expiration le Date	Title	Amount or Number of Shares						

- 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"), 29 by MPM Asset Management Investors BV2014 LLC ("AM BV2014") and 1,119 by UBS Oncology Impact Fund L.P. ("UBS Oncology").
- 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)"), 73,014 by AM BV2014 and 1,750,893 by UBS Oncology. 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. Ansbert Gadicke is a managing director of BV LLC. MPM Oncology Impact Management GP LLC ("Oncology GP LLC") is the General Partner of MPM Oncology Impact Management LP, the General Partner of Oncology Impact Fund (Cayman) Management L.P., the General Partner of UBS Oncology Impact Fund, L.P. Ansbert Gadicke is the Managing Member of Oncology GP 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, 62 by AM BV2014 and 2,365 by UBS Oncology.
- 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), 72,952 by AM BV2014 and 1,748,528 by UBS Oncology. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

Remarks:

/s/ Ansbert Gadicke

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.