

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL | |
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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 and Address of Reporting Person* <u>GADICKE ANSBERT</u> (Last) (First) (Middle) C/O MPM CAPITAL 450 KENDALL STREET (Street) CAMBRIDGE MA 02142 (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>Repare Therapeutics Inc. [RPTX]</u> | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below) |
| | 3. Date of Earliest Transaction (Month/Day/Year) 05/25/2021 | |
| | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> 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. 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 | 05/25/2021 | | s ⁽¹⁾ | | 6,472 ⁽²⁾ | D | \$32.87 ⁽³⁾ | 4,272,759 | I | See Footnote ⁽⁴⁾ |
| Common Shares | 05/25/2021 | | s ⁽¹⁾ | | 100 ⁽⁵⁾ | D | \$33.59 | 4,272,659 | I | See Footnote ⁽⁶⁾ |
| Common Shares | 05/26/2021 | | s ⁽¹⁾ | | 22,332 ⁽⁷⁾ | D | \$32.74 ⁽⁸⁾ | 4,250,327 | I | See Footnote ⁽⁹⁾ |
| Common Shares | 05/26/2021 | | s ⁽¹⁾ | | 1,704 ⁽¹⁰⁾ | D | \$33.01 ⁽¹¹⁾ | 4,248,623 | I | See Footnote ⁽¹²⁾ |
| Common Shares | 05/27/2021 | | s ⁽¹⁾ | | 4,327 ⁽¹³⁾ | D | \$32.81 ⁽¹⁴⁾ | 4,244,296 | I | See Footnote ⁽¹⁵⁾ |
| Common Shares | 05/27/2021 | | s ⁽¹⁾ | | 3,624 ⁽¹⁶⁾ | D | \$33.16 ⁽¹⁷⁾ | 4,240,672 | I | See Footnote ⁽¹⁸⁾ |

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) |
|--|--|--------------------------------------|--|--------------------------------|--|-----|--|-----------------|---|--|--|---|--|
| | | | | | (A) | (D) | Date Exercisable | Expiration Date | | | | | |

Explanation of Responses:

- Transaction effected pursuant to a plan established pursuant to Rule 10b5-1 on 3/31/2021.
- The shares were sold as follows: 2,756 by MPM BioVentures 2014, L.P. ("BV 2014"), 96 by MPM Asset Management Investors BV2014 LLC ("AM BV2014") and 3,620 by UBS Oncology Impact Fund L.P. ("UBS Oncology").
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$32.45 to \$33.32 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.
- The shares are held as follows: 2,202,927 by BV 2014, 135,843 by MPM BioVentures 2014(B), L.P. ("BV 2014(B)"), 75,825 by AM BV2014 and 1,858,164 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.
- The shares were sold as follows: 43 by BV 2014, 1 by AM BV2014 and 56 by UBS Oncology.
- The shares are held as follows: 2,202,884 by BV 2014, 135,843 by BV 2014(B), 75,824 by AM BV2014 and 1,858,108 by UBS Oncology. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
- The shares were sold as follows: 9,512 by BV 2014, 327 by AM BV2014 and 12,493 by UBS Oncology.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$31.955 to \$32.90 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.
- The shares are held as follows: 2,193,372 by BV 2014, 135,843 by BV 2014(B), 75,497 by AM BV2014 and 1,845,615 by UBS Oncology. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.
- The shares were sold as follows: 726 by BV 2014, 25 by AM BV2014 and 953 by UBS Oncology.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$32.98 to \$33.12 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.

12. The shares are held as follows: 2,192,646 by BV 2014, 135,843 by BV 2014(B), 75,472 by AM BV2014 and 1,844,662 by UBS Oncology. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

13. The shares were sold as follows: 1,843 by BV 2014, 63 by AM BV2014 and 2,421 by UBS Oncology.

14. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$32.07 to \$33.05 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.

15. The shares are held as follows: 2,190,803 by BV 2014, 135,843 by BV 2014(B), 75,409 by AM BV2014 and 1,842,241 by UBS Oncology. The Reporting Person disclaims beneficial ownership of the securities except to the extent of his pecuniary interest therein.

16. The shares were sold as follows: 1,544 by BV 2014, 53 by AM BV2014 and 2,027 by UBS Oncology.

17. The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$33.075 to \$33.59 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.

18. The shares are held as follows: 2,189,259 by BV 2014, 135,843 by BV 2014(B), 75,356 by AM BV2014 and 1,840,214 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

05/27/2021

** 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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