FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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

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

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* Wolchko J Scott       |  |  |          |          | FAT                              | 2. Issuer Name and Ticker or Trading Symbol FATE THERAPEUTICS INC [FATE] |         |  |   |        |                  |  |  |   | tionship of<br>all applic<br>Director | ,  |                | rson(s) to Is  |                         |  |
|--|--|--|----------|----------|----------------------------------|--|---------|--|---|--------|------------------|--|--|---|---------------------------------------|--|----------------|--|-------------------------|--|
| (Last)   | (Fi  | rst) (                                     | Middle)  |          |                                  | 3. Date of Earliest Transaction (Month/Day/Year) 01/04/2017              |         |  |   |        |                  |  |  | X   | Officer below)                        | r (give title  |                | Other (s   | specify                 |  |
| C/O FATE THERAPEUTICS, INC.;                                   |  |  |          |          |                                  |  |         |  |   |        |                  |  |  | President and CEO   |                                       |  |                |  |                         |  |
| 3535 GENERAL ATOMICS COURT #200                                |  |  |          |          | 4. If A                          | 4. If Amendment, Date of Original Filed (Month/Day/Year)                 |         |  |   |        |                  |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line) |                                       |  |                |  |                         |  |
| (Street)   |  |  |          |          |                                  |  |         |  |   |        |                  |  | "  | X   | Form fil                              | ed by One  | e Repo         | orting Perso   | on                      |  |
| SAN DIEGO CA 92121   |  |  |          |          |                                  |  |         |  |   |        |                  |  | Form filed by More than One Reporting Person |   |                                       |  |                |  |                         |  |
| (City)   | (S   | tate) (                                    | Zip)     |          |                                  |  |         |  |   |        |                  |  |  |   |                                       |  |                |  |                         |  |
|  |  | Tab  | le I - N | on-Deriv | ative S                          | Sec  | urities | Acc  | quired, D   | isp    | osed o           | f, or Be   | neficia                                      | lly   | Owned                                 |  |                |  |                         |  |
| 1. Title of Security (Instr. 3)  2. Transacti Date (Month/Day) |  |  |          |          | Execution Date,                  |  |         | 3. Transaction Code (Instr. 8)  4. Securities Acquirities Acquirit |   |        |                  |  |  | 5. Amount of<br>Securities<br>Beneficially<br>Owned         |                                       | 6. Ownership<br>Form: Direct<br>(D) or<br>Indirect (I)<br>(Instr. 4)   |                | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership                |                         |  |
|  |  |  |          |          |                                  |  |         | Code   | v   | Amount | nt (A) or (D)    |  |  | Followin<br>Reported<br>Transact<br>(Instr. 3               | ted<br>action(s)                      |  | . 4)           | (Instr. 4)   |                         |  |
|  | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) |  |          |          |                                  |  |         |  |   |        |                  |  |  |   |                                       |  |                |  |                         |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)            | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security  | 3. Transaction<br>Date<br>(Month/Day/Year) | if any   | on Date, | 4.<br>Transact<br>Code (In<br>8) |  | n of    |  | 6. Date Exercisable an<br>Expiration Date<br>(Month/Day/Year) |        | е                | d 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative Sect<br>(Instr. 3 and 4) |  | of<br>D<br>Se   | erivative<br>ecurity<br>nstr. 5)      | 9. Numbe<br>derivative<br>Securities<br>Beneficia<br>Owned<br>Following<br>Reported<br>Transacti<br>(Instr. 4) | e<br>s<br>Illy | Ownershi<br>Form:<br>Direct (D)<br>or Indirec<br>(I) (Instr.<br>4) | Beneficial<br>Ownership |  |
|  |  |  |          |          | Code                             | v  | (A)     | (D)  | Date<br>Exercisable   |        | xpiration<br>ate | Title  | Amount<br>or<br>Number<br>of<br>Shares       |   |                                       |  |                |  |                         |  |
| Stock<br>Option<br>(right to<br>buy)                           | \$2.73   | 01/04/2017                                 |          |          | A                                |  | 250,000 |  | (1)   | 0      | 1/03/2027        | Common<br>Stock  | 250,00                                       | 0   | (2)                                   | 250,00   | 00             | D  |                         |  |

## Explanation of Responses:

- 1. The shares subject to this option shall vest and become exercisable in 48 equal monthly installments beginning on February 4, 2017 such that this option is fully exercisable on January 4, 2021.
- 2. Not applicable.

## Remarks:

/s/ Cindy R. Tahl, as Attorneyin-Fact <u>01/06/2017</u>

\*\* 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.