

| OMB APPROVAL | |
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| OMB Number: | 3235-0104 |
| Estimated average burden hours per response: | 0.5 |

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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>VENROCK ASSOCIATES V LP</u> <hr/> (Last) (First) (Middle) C/O VENROCK 3340 HILLVIEW AVENUE <hr/> (Street) PALO ALTO CA 94304 <hr/> (City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year) 09/30/2013 | 3. Issuer Name and Ticker or Trading Symbol <u>FATE THERAPEUTICS INC [FATE]</u> | |
| | | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) <input type="checkbox"/> | 5. If Amendment, Date of Original Filed (Month/Day/Year) <hr/> 6. Individual or Joint/Group Filing (Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person |

Table I - Non-Derivative Securities Beneficially Owned

| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|
| | | | |

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) | | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) | |
|--|--|-----------------|---|--|--|---|----------------------------|
| | Date Exercisable | Expiration Date | | | | | |
| Series A Convertible Preferred Stock | (1) | (1) | Common Stock | 675,492 | (1) | I | By Funds ⁽²⁾⁽³⁾ |
| Series B Convertible Preferred Stock | (4) | (4) | Common Stock | 265,252 | (4) | I | By Funds ⁽³⁾⁽⁵⁾ |
| Series C Convertible Preferred Stock | (1) | (1) | Common Stock | 570,663 | (1) | I | By Funds ⁽³⁾⁽⁶⁾ |

| | | |
|--|--|--|
| 1. Name and Address of Reporting Person* <u>VENROCK ASSOCIATES V LP</u> <hr/> (Last) (First) (Middle) C/O VENROCK 3340 HILLVIEW AVENUE <hr/> (Street) PALO ALTO CA 94304 <hr/> (City) (State) (Zip) | | |
| | | |

1. Name and Address of Reporting Person*

[VENROCK PARTNERS V L P](#)

(Last) (First) (Middle)

C/O VENROCK

3340 HILLVIEW AVENUE

(Street)

PALO ALTO

CA

94304

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[Venrock Entrepreneurs Fund V, L.P.](#)

(Last) (First) (Middle)

C/O VENROCK

3340 HILLVIEW AVENUE

(Street)

PALO ALTO

CA

94304

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[Venrock Management V, LLC](#)

(Last) (First) (Middle)

C/O VENROCK

3340 HILLVIEW AVENUE

(Street)

PALO ALTO

CA

94304

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[Venrock Partners Management V, LLC](#)

(Last) (First) (Middle)

C/O VENROCK

3340 HILLVIEW AVENUE

(Street)

PALO ALTO

CA

94304

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[VEF Management V, LLC](#)

(Last) (First) (Middle)

C/O VENROCK

3340 HILLVIEW AVENUE

(Street)

PALO ALTO

CA

94304

(City)

(State)

(Zip)

Explanation of Responses:

1. The aggregate number of shares of Issuer's Preferred Stock held by the Reporting Person converts into Common Stock immediately prior to the closing of the Issuer's initial public offering and has no expiration date. These shares convert into Common Stock on a 1-for-1 basis.
2. Consists of an aggregate of 609,497 shares of Series A Convertible Preferred Stock ("Series A Stock") held by Venrock Associates V, L.P. ("Venrock"), 51,675 shares of Series A Stock held by Venrock Partners V, L.P. ("Venrock Partners"), and 14,320 shares of Series A Stock held by Venrock Entrepreneurs Fund V, L.P. ("Venrock Entrepreneurs" and together with Venrock and Venrock Partners, the "Venrock Entities").
3. The sole general partner of Venrock is Venrock Management V, LLC ("VM5"). The sole general partner of Venrock Partners is Venrock Partners Management V, LLC ("VPM5"). The sole general partner of Venrock Entrepreneurs is VEF Management V, LLC ("VEFM5"). VM5, VPM5 and VEFM5 disclaim beneficial ownership over all shares held by the Venrock Entities, except to the extent of their indirect pecuniary interests therein.
4. The aggregate number of shares of Issuer's Preferred Stock held by the Reporting Person converts into Common Stock immediately prior to the closing of the Issuer's initial public offering and has no expiration date. These shares convert into Common Stock on approximately a 1-for-1.15 basis.
5. Consists of an aggregate of 239,337 shares of Series B Convertible Preferred Stock ("Series B Stock") held by Venrock, 20,292 shares of Series B Stock held by Venrock Partners, and 5,623 shares of Series B Stock held by Venrock Entrepreneurs.
6. Consists of an aggregate of 514,910 shares of Series C Convertible Preferred Stock ("Series C Stock") held by Venrock, 43,655 shares of Series C Stock held by Venrock Partners, and 12,098 shares of Series C Stock held by Venrock Entrepreneurs.

Remarks:

/s/ David L. Stepp, Authorized 09/30/2013
Signatory

** 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 5 (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.