

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL	
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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>Redmile Group, LLC</u> (Last) (First) (Middle) ONE LETTERMAN DRIVE, BUILDING D SUITE D3-300 (Street) SAN FRANCISCO CA 94129 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>FATE THERAPEUTICS INC [FATE]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 07/31/2019	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

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 Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

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)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Class A Convertible Preferred Stock	(1)(2)	07/31/2019		J(3)			25,000	(1)(2)	(1)(2)	Common Stock	125,000	(3)	2,794,549	I	See Footnote(4)(5)
Class A Convertible Preferred Stock	(1)(2)	07/31/2019		J(3)			25,000	(1)(2)	(1)(2)	Common Stock	125,000	(3)	25,000	D(5)(6)	
Class A Convertible Preferred Stock	(1)(2)	07/31/2019		G(7)			25,000	(1)(2)	(1)(2)	Common Stock	125,000	\$0	0	D(5)(6)	

1. Name and Address of Reporting Person*
Redmile Group, LLC
 (Last) (First) (Middle)
 ONE LETTERMAN DRIVE, BUILDING D
 SUITE D3-300
 (Street)
 SAN FRANCISCO CA 94129
 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Green Jeremy
 (Last) (First) (Middle)
 ONE LETTERMAN DRIVE, BUILDING D
 SUITE D3-300
 (Street)
 SAN FRANCISCO CA 94129
 (City) (State) (Zip)

Explanation of Responses:

1. The Class A Convertible Preferred Stock is convertible into shares of the Issuer's common stock in accordance with the terms of the Issuer's Amended and Restated Certificate of Incorporation and Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock at any time and from time to time at the holder's election using a calculation based on the stated value of the shares and the

- conversion rate in effect at the time of conversion. The shares of Class A Convertible Preferred Stock will currently convert on a 1-for-5 basis and such conversion rate is reflected in the amount listed under Column 7.
2. The terms of the Class A Convertible Preferred Stock provide that the holder may not convert any shares of Class A Convertible Preferred Stock if, after giving effect to the attempted conversion, the holder and its affiliates would collectively beneficially own more than 9.99% of the number of shares of Common Stock outstanding after giving effect to such attempted conversion. The Class A Convertible Preferred Stock has no expiration date.
3. Distribution from a private investment vehicle managed by Redmile Group, LLC ("Redmile") to an affiliate of Redmile that is a shareholder of of such private investment vehicle to Jeremy Green, who is a member of such affiliate.
4. These securities are directly owned by certain private investment vehicles and separately managed accounts managed by Redmile and may be deemed beneficially owned by Redmile as investment manager of such private investment vehicles and separately managed accounts. The reported securities may also be deemed beneficially owned by Jeremy Green as the principal of Redmile. The Reporting Persons disclaim beneficial ownership of the reported securities except to the extent of their pecuniary interest therein, and this report shall not be deemed an admission that such Reporting Persons are the beneficial owners of the securities for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, or for any other purpose.
5. Michael Lee, a member of the board of directors of the Issuer and a managing director of Redmile, was elected to the board of the Issuer as a representative of Redmile. As a result, the Reporting Persons are directors by deputization for purposes of Section 16 of the Securities Exchange Act of 1934, as amended.
6. These securities are directly owned by Jeremy Green. Redmile disclaims beneficial ownership of the reported securities except to the extent of its pecuniary interest therein, if any, and this report shall not be deemed an admission that Redmile is the beneficial owner of the securities for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, or for any other purpose.
7. Gift to a charitable foundation.

/s/ Jeremy Green, Managing
Member of Redmile Group, LLC 08/02/2019

/s/ Jeremy Green 08/02/2019

** 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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