
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 21, 2016

FATE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

001-36076
(Commission
File Number)

65-1311552
(I.R.S. Employer
Identification No.)

3535 General Atomics Court, Suite 200
San Diego, CA 92121
(Address of principal executive offices, including zip code)

(858) 875-1800
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 1.01. Entry into a Material Definitive Agreement.

On November 21, 2016, Fate Therapeutics, Inc. (the “Company”) entered into a Securities Purchase Agreement (the “Securities Purchase Agreement”) for a private placement (the “Private Placement”) with a select group of institutional investors, including entities affiliated with Redmile Group, LLC (“Redmile”), entities affiliated with BVF Partners L.P., EcoR1 Capital, LLC and Franklin Advisers, Inc., and other accredited investors, certain of whom are affiliated with the directors and officers of the Company (collectively, the “Purchasers”). Pursuant to the Securities Purchase Agreement, Redmile has agreed to purchase 2,819,549 shares of the Company’s Class A Convertible Preferred Stock, par value \$0.001 per share (the “Preferred Shares”), at a price of \$13.30 per share, and the remaining Purchasers have agreed to purchase an aggregate of 7,236,837 shares of the Company’s common stock, par value \$0.001 per share (the “Common Shares,” and together with the Preferred Shares, the “Shares”), at a price of \$2.66 per share, for an aggregate purchase price of approximately \$57.0 million. The closing of the purchase and sale of the Shares is expected to occur on or about November 23, 2016, subject to customary closing conditions.

Each Preferred Share is convertible into five shares of the Company’s common stock. Redmile will be prohibited from converting the Preferred Shares into shares of the Company’s common stock if, as a result of such conversion, Redmile, together with its affiliates, would own more than 9.99% of the shares of the Company’s common stock then issued and outstanding, which percentage may change at Redmile’s election upon 61 days’ notice to the Company to (i) any other number less than or equal to 19.99% or (ii) subject to approval of the Company’s stockholders to the extent required in accordance with the NASDAQ Global Market rules, any number in excess of 19.99%.

In the event of the Company’s liquidation, dissolution or winding up, holders of Preferred Shares will participate *pari passu* with the holders of the Company’s common stock in any distribution of proceeds, pro rata based on the number of shares held by each such holder. The Preferred Shares will generally have no voting rights.

The Company also entered into a registration rights agreement (the “Registration Rights Agreement”) with certain of the Purchasers, excluding those Purchasers affiliated with the Company’s directors and officers, requiring the Company to register the resale of the Shares. The Company is required to prepare and file a registration statement with the Securities and Exchange Commission (the “SEC”) within 60 days of the closing of the Private Placement, and to use commercially reasonable efforts to have the registration statement declared effective within 135 days if there is no review by the SEC, and within 160 days in the event of such review. The Registration Rights Agreement provides, among other things, that in the event (i) the Company does not file the registration statement within the prescribed time period, (ii) the SEC does not declare the registration statement effective within the prescribed time period, or (iii) the registration statement ceases to be effective under certain circumstances, the Company will pay to the holders on the occurrence of each such event and for each 30-day period thereafter until the applicable event is cured, an amount in cash equal to 1% of the aggregate amount invested by the holders with respect to the affected securities (as specified in greater detail in the Registration Rights Agreement) for each 30-day period (prorated for any period of less than 30 days) during which such registration statement was not effective, subject to certain limitations.

In addition, Redmile shall also receive the right to designate an individual to attend all meetings of the Company’s board of directors in a non-voting observer capacity, which right is non-assignable and shall terminate upon the earlier of (i) the third anniversary of the closing of the Private Placement or (ii) the date upon which Redmile’s total ownership no longer exceeds 15% of the Company’s total shares of common stock on an as-converted basis.

The Shares to be issued to the Purchasers under the Securities Purchase Agreement will be issued pursuant to an exemption from registration under Rule 506 of Regulation D, which is promulgated under the Securities Act of 1933 (the “Securities Act”). The Company relied on this exemption from registration based in part on representations made by the Purchasers.

Leerink Partners LLC acted as exclusive placement agent in connection with the Private Placement, and the Company has agreed to pay a customary placement fee and reimburse certain expenses of the placement agent.

The sale of the Shares pursuant to the Securities Purchase Agreement has not been registered under the Securities Act or any state securities laws. The Shares may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. Neither this Current Report on Form 8-K, nor the exhibits attached hereto is an offer to sell or the solicitation of an offer to buy the securities described herein.

The Company expects to use the proceeds from the financing towards working capital and general corporate purposes.

The above description of the material terms of the Private Placement is qualified in its entirety by reference to the Securities Purchase Agreement attached hereto as Exhibit 10.1 and the Registration Rights Agreement attached hereto as Exhibit 10.2.

Item 3.02 Unregistered Sales of Equity Securities.

The information contained above under Item 1.01 is hereby incorporated by reference in response to this Item 3.02 of Form 8-K.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

In connection with and prior to the closing of the Private Placement, the Company will designate 2,819,549 shares of its authorized and unissued preferred stock as Class A Convertible Preferred Stock and file a Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock with the Secretary of State of Delaware. A summary of the rights, preferences and privileges of the Class A Convertible Preferred Stock is described above under “Item 1.01 Entry into a Material Definitive Agreement,” which is incorporated by reference herein.

Item 7.01. Regulation FD Disclosure.

On November 22, 2016, the Company issued a press release announcing its entry into the Securities Purchase Agreement with the Purchasers. A copy of the press release is being furnished as Exhibit 99.1 to this Report on Form 8-K.

The information in Item 7.01 of this Current Report on Form 8-K and Exhibit 99.1 attached hereto is being furnished and shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (“Exchange Act”) or otherwise subject to the liability of that section, nor shall such information be deemed incorporated by reference in any filing under the Exchange Act or the Securities Act of 1933, as amended, regardless of the general incorporation language of such filing, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits.

Exhibit No.	Description
10.1	Securities Purchase Agreement, dated November 21, 2016, by and among the Company and the Purchasers
10.2	Registration Rights Agreement, dated November 21, 2016, by and among the Company and the Purchasers
99.1	Press Release dated November 22, 2016

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: November 22, 2016

Fate Therapeutics, Inc.

By: /s/ J. Scott Wolchko
J. Scott Wolchko
President and Chief Executive Officer

SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this “**Agreement**”) is dated as of November 21, 2016, by and among Fate Therapeutics, Inc., a Delaware corporation (the “**Company**”), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a “**Purchaser**” and collectively, the “**Purchasers**”).

RECITALS

A. The Company and each Purchaser is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**Securities Act**”), and Rule 506 of Regulation D (“**Regulation D**”) as promulgated by the United States Securities and Exchange Commission (the “**Commission**”) under the Securities Act.

B. Each Purchaser, severally and not jointly, wishes to purchase, and the Company wishes to sell, upon the terms and conditions stated in this Agreement, that aggregate number of shares of common stock, par value \$0.001 per share (the “**Common Stock**”), of the Company, and that aggregate number of shares of Class A Preferred Stock, par value \$0.001 per share (the “**Preferred Stock**”) set forth below such Purchaser’s name on the signature page of this Agreement (which aggregate amount for all Purchasers together shall be 7,236,837 shares of Common Stock and 2,819,549 shares of Preferred Stock, and shall be collectively referred to herein as the “**Shares**”).

C. Contemporaneously with the execution and delivery of this Agreement, certain of the parties hereto are executing and delivering a Registration Rights Agreement in the form attached hereto as Exhibit A (the “**Registration Rights Agreement**”), pursuant to which, among other things, the Company will agree to provide certain registration rights with respect to the Shares and the Underlying Shares (as defined below) under the Securities Act and the rules and regulations promulgated thereunder and applicable state securities laws. Certain of the parties hereto are affiliated with the Company’s directors and officers and will not be entering into the Registration Rights Agreement with the Company.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and the Purchasers hereby agree as follows:

ARTICLE I.
DEFINITIONS

1.1 **Definitions.** In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms shall have the meanings indicated in this Section 1.1:

“**Affiliate**” means, with respect to any Person, any other Person that, directly or indirectly through one or more intermediaries, Controls, is controlled by or is under common control with such Person, as such terms are used in and construed under Rule 405 under the Securities Act. With respect to a

Purchaser, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such Purchaser will be deemed to be an Affiliate of such Purchaser.

“Board of Directors” means the board of directors of the Company.

“Business Day” means any day except Saturday, Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Certificate of Designation” means the Certificate of Designation of Rights, Preferences and Privileges of the Class A Preferred Stock setting forth the preferences, rights and limitations of the Preferred Stock to be filed prior to the Closing by the Company with the Secretary of State of Delaware substantially in the form attached hereto as Exhibit G.

“Closing” means the closing of the purchase and sale of the Shares pursuant to this Agreement.

“Closing Date” means, subject to the execution and delivery of the Transaction Documents by the applicable parties thereto and the satisfaction or waiver of all of the conditions set forth in Sections 2.1, 2.2, 5.1 and 5.2 hereof, as the case may be, a date within three (3) calendar days following the date hereof, or such other date as the parties may mutually agree.

“Common Stock” has the meaning set forth in the Recitals, and also includes any other class of securities into which the Common Stock may hereafter be reclassified or changed into.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Company Counsel” means Goodwin Procter LLP, with offices located at 3 Embarcadero Center, San Francisco, CA 94111.

“Company’s Knowledge” means with respect to any statement made to the Company’s Knowledge, that the statement is based upon the actual knowledge of the officers of the Company having responsibility for the matter or matters that are the subject of the statement.

“Control” (including the terms “controlling”, “controlled by” or “under common control with”) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

“**GAAP**” means U.S. generally accepted accounting principles, as applied by the Company.

“**Irrevocable Transfer Agent Instructions**” means, with respect to the Company, the Irrevocable Transfer Agent Instructions, in the form of Exhibit C, executed by the Company and delivered to and acknowledged in writing by the Transfer Agent.

“**Liens**” means a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“**New York Courts**” means the state and federal courts sitting in the City of New York, Borough of Manhattan.

“**Person**” means an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

“**Preferred Stock**” means Class A Preferred Stock, par value \$0.001 per share issued pursuant to this Agreement, and any securities into which such Class A Preferred Stock may hereinafter be reclassified.

“**Proceeding**” means an action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“**Purchase Price**” means \$2.66 per share of Common Stock and \$13.30 per share of Preferred Stock.

“**Registration Statement**” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by certain of the Purchasers of the Registrable Securities (as defined in the Registration Rights Agreement).

“**Rule 144**” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“**SEC Filings**” shall mean all reports, schedules, forms, statements and other documents filed or required to be filed by the Company with the Commission pursuant to the requirements of the Securities Act or the Exchange Act, including material filed pursuant to Section 13(a) or 15(c) of the Exchange Act, in each case, together with all exhibits, supplements, amendments and schedules thereto, and all documents incorporated by reference therein.

“**Short Sales**” include, without limitation, (i) all “short sales” as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, whether or not against the box, and all types of direct and indirect stock pledges, forward sale contracts, options, puts, calls, short sales, swaps, “put equivalent positions” (as defined in Rule 16a-1(h) under the Exchange Act) and similar arrangements (including on a total return basis), and (ii) sales and other transactions through non-U.S. broker dealers or

foreign regulated brokers (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“**Subscription Amount**” means, with respect to each Purchaser, the aggregate amount to be paid for the Shares purchased hereunder as indicated on such Purchaser’s signature page to this Agreement next to the heading “Aggregate Purchase Price (Subscription Amount)” in United States dollars and in immediately available funds.

“**Subsidiary**” means any corporation or other business entity with respect to which the Company owns in excess of 50% of such corporation’s or other entity’s outstanding voting securities, and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof, in each case in which the Company will own in excess of 50% of such subsidiary’s outstanding voting securities at the Closing.

“**Threshold Amount**” shall have the meaning set forth in the Certificate of Designation.

“**Trading Day**” means a day on which the Common Stock is listed or quoted and traded on its Trading Market.

“**Trading Market**” means the trading market on which the Common Stock is primarily listed on and quoted for trading, which, as of the date of this Agreement and the Closing Date, shall be The NASDAQ Global Market.

“**Transaction Documents**” means this Agreement, the schedules and exhibits attached hereto, the Registration Rights Agreement, the Certificate of Designation, the Irrevocable Transfer Agent Instructions and any other documents or agreements explicitly contemplated hereunder.

“**Transfer Agent**” means American Stock Transfer & Trust Company, LLC, the current transfer agent of the Company, with a mailing address of 6201 15th Avenue, Brooklyn, NY 11219, or any successor transfer agent for the Company.

“**Underlying Shares**” means the shares of Common Stock issued or issuable upon conversion of the Preferred Stock.

ARTICLE II. PURCHASE AND SALE

2.1 Closing.

(a) Amount. Subject to the terms and conditions set forth in this Agreement, at the Closing, the Company shall issue and sell to each Purchaser, and each Purchaser shall, severally and not jointly, purchase from the Company, such number of Shares set forth on the signature pages hereto for the aggregate Purchase Price with respect to such Shares.

(b) Underlying Shares. The Company has authorized and has reserved and covenants to continue to reserve, free of preemptive rights and other similar contractual rights of stockholders, a number of its authorized but unissued shares of Common Stock equal to the aggregate number of shares of Common Stock necessary to effect the conversion of the Preferred Stock. The Purchasers acknowledge that the Company shall not be required to issue any shares of Common Stock to a Purchaser upon conversion by such Purchaser (or its assigns) of any shares of the Preferred Stock to the extent (and only to the extent) that such conversion would result in the Purchaser (including its predecessors-in-interest) beneficially owning shares of Common Stock in excess of the applicable Threshold Amount unless approved by the Corporation's stockholders in accordance with the applicable stockholder approval requirements of Nasdaq Marketplace Rule 5635.

(c) Closing. The Closing of the purchase and sale of the Shares shall take place at the offices of Goodwin Procter LLP, 3 Embarcadero Center, San Francisco, CA 94111 on the Closing Date or at such other locations or remotely by facsimile transmission or other electronic means as the parties may mutually agree.

(d) Form of Payment. Except as may otherwise be agreed to among the Company and one or more of the Purchasers, on the Closing Date, each Purchaser shall wire its Subscription Amount, in United States dollars and in immediately available funds, to a bank account designated by the Company as set forth on Exhibit F hereto. On the Closing Date, the Company shall irrevocably instruct the Transfer Agent to issue to each Purchaser the Shares in book entry form in such names as Purchasers may designate in an amount equal to the number of Shares such Purchaser is purchasing as is set forth on such Purchaser's signature page to this Agreement next to the heading "Number of Shares to be Acquired" and the Company and the Purchasers shall deliver the other items deliverable at Closing set forth in Section 2.2.

2.2 Closing Deliveries.

(a) On or prior to the Closing, the Company shall issue, deliver or cause to be delivered to each Purchaser the following (the "Company Deliverables"):

(i) this Agreement, duly executed by the Company;

(ii) a legal opinion of Company Counsel, dated as of the Closing Date and in the form attached hereto as Exhibit B, executed by such counsel and addressed to the Purchasers;

(iii) the Registration Rights Agreement, duly executed by the Company;

(iv) duly executed Irrevocable Transfer Agent Instructions instructing the Transfer Agent to deliver a book entry statement evidencing the number of each class of Shares purchased by the Purchaser hereunder, registered in the name of such Purchaser;

(v) a certificate of the Secretary of the Company (the "Secretary's Certificate"), dated as of the Closing Date, (a) certifying the resolutions adopted by the Board of Directors approving the transactions contemplated by this Agreement and the other Transaction Documents and the issuance of the Shares, (b) certifying the current versions of the Amended and Restated Certificate of

Incorporation, Amended and Restated Bylaws of the Company and Certificate of Designation and (c) certifying as to the signatures and authority of persons signing the Transaction Documents and related documents on behalf of the Company, in the form attached hereto as Exhibit D;

(vi) the Compliance Certificate referred to in Section 5.1(h);

(vii) a certificate evidencing the formation and good standing of the Company issued by the Secretary of State of Delaware, as of a date within five (5) Business Days of the Closing Date;

(viii) a certificate evidencing the Company's qualification as a foreign corporation and good standing issued by the Secretary of State of California (or comparable office), as of a date within five (5) Business Days of the Closing Date;

(ix) a certified copy of the Amended and Restated Certificate of Incorporation, as certified by the Secretary of State (or comparable office) of Delaware, as of a date within five (5) Business Days of the Closing Date; and

(x) evidence that the shares of Common Stock and the Underlying Shares issued or to be issued to the Purchasers have been approved for listing on the Trading Market, subject only to official notice of issuance.

(b) On or prior to the Closing, each Purchaser shall deliver or cause to be delivered to the Company the following (the "**Purchaser Deliverables**"):

(i) this Agreement, duly executed by such Purchaser;

(ii) its Subscription Amount, in United States dollars and in immediately available funds, in the amount set forth as the "*Purchase Price*" indicated below such Purchaser's name on the applicable signature page hereto under the heading "*Aggregate Purchase Price (Subscription Amount)*" by wire transfer to the bank account designated by the Company as set forth on Exhibit F attached hereto; and

(iii) the Registration Rights Agreement, duly executed by each such Purchaser that is entering into the Registration Rights Agreement.

ARTICLE III. REPRESENTATIONS AND WARRANTIES

3.1 Representations and Warranties of the Company. The Company hereby represents and warrants to the Purchasers as of the date hereof and the Closing Date (except for the representations and warranties that speak as of a specific date, which shall be made as of such date) as follows:

(a) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its

properties and assets and to carry on its business. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "**Material Adverse Effect**") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(b) Authorization; Due Execution. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by each of the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder including, without limitation, the issuance of the Shares and the Underlying Shares. The execution and delivery of each of the Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection therewith other than in connection with the Required Approvals (as defined in Section 3.1(p) herein). Each Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(c) Valid Issuance of Stock. The Shares to be issued at Closing have been duly and validly authorized and when issued and paid for in accordance with the terms of the Transaction Documents, will be duly and validly issued, fully paid and non-assessable free and clear of all Liens and, based in part upon the representations and warranties of the Purchasers in this Agreement, will be issued in compliance with all applicable federal and state securities laws. The Underlying Shares to be issued upon conversion of the Preferred Stock have been duly authorized by all necessary corporate action and when issued and paid for in accordance with the terms of this Agreement and as set forth in the Certificate of Designation, such shares will be validly issued and outstanding, fully paid and nonassessable, free and clear of all Liens and the holders shall be entitled to all rights accorded to a holder of Common Stock.

(d) No Conflict. The execution, delivery and performance by the Company of the Transaction Documents, the issuance and sale of the Shares or the Underlying Shares and the consummation by it of the transactions contemplated hereby and thereby to which it is a party do not and will not (i) conflict

with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as would not reasonably be expected to result in a Material Adverse Effect.

(e) SEC Filings. The Company has timely filed with the Commission all SEC Filings. The SEC Filings were prepared in accordance with and, as of the date on which each such SEC Filing was filed with the Commission, complied in all material respects with the applicable requirements of the Securities Act and Exchange Act. None of such SEC Filings, including, without limitation, any financial statements, exhibits and schedules included therein and documents incorporated therein by reference, at the time filed, declared effective or mailed, as the case may be, contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.

(f) Material Changes. Since September 30, 2016, except as specifically disclosed in SEC Filings dated prior to the Closing Date: (i) there have been no events, occurrences or developments that have had or would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect on the business, operations or financial condition of the Company, (ii) the Company has not incurred any material liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting or the manner in which it keeps its accounting books and records in any material respect, (iv) the Company has not declared or made any dividend or distribution of cash, shares of capital stock or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock (other than in connection with repurchases of unvested stock issued to employees of the Company), and (v) the Company has not issued any equity securities, except pursuant to the Company's 2013 Stock Option and Incentive Plan and this Agreement.

(g) No Undisclosed Events, Liabilities, Developments or Circumstances. No event, liability, development or circumstance has occurred or exists with respect to the business, properties, liabilities, operations (including results thereof) or condition (financial or otherwise) of the Company and its Subsidiaries, taken as a whole, that (i) would be required to be disclosed by the Company under applicable securities laws on a registration statement filed with the SEC relating to an issuance and sale by the

Company of its Common Stock and which has not been publicly announced or (ii) could have a Material Adverse Effect.

(h) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Shares, will not be or be an Affiliate of, an “investment company” within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become subject to the Investment Company Act of 1940, as amended.

(i) Registration Rights and other Stockholder Agreements. Other than pursuant to (i) the registration rights agreement by and among the Company and the other parties named therein dated August 6, 2016 and (ii) the Amended and Restated Investor Rights Agreement, dated August 8, 2013 by and between the Company and the stockholders named therein, as amended by the Amendment to Amended and Restated Investor Rights Agreement dated as of May 4, 2015, no Person has any right to cause the Company to effect the registration under the Securities Act covering the transfer of any securities of the Company and there are no other stockholders agreements, voting agreements or other similar agreements with respect to the Company’s capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company’s stockholders.

(j) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act, and the Company has taken no action designed to terminate the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. The Company has not, in the previous twelve (12) months, received (i) written notice from the Trading Market that the Company is not in compliance with the listing or maintenance requirements of Trading Market that would result in immediate delisting or (ii) any notification, Staff Delisting Determination, or Public Reprimand Letter (as such terms are defined in applicable listing rules of the Trading Market) that requires a public announcement by the Company of any noncompliance or deficiency with respect to such listing or maintenance requirements. The Company is in compliance with all listing and maintenance requirements of the Trading Market on the date hereof.

(k) No Integrated Offering. Assuming the accuracy of the Purchasers’ representations and warranties set forth in Section 3.2 hereof, none of the Company nor, to the Company’s Knowledge, any of its Affiliates or any Person acting on its behalf has, directly or indirectly, at any time within the past six (6) months, made any offers or sales of any Company security or solicited any offers to buy any security under circumstances that would (i) eliminate the availability of the exemption from registration under Regulation D under the Securities Act in connection with the offer and sale by the Company of the Shares or (ii) cause the offering of the Shares to be integrated with prior offerings by the Company for purposes of any applicable law, regulation or stockholder approval provisions, including, without limitation, under the rules and regulations of the Trading Market.

(l) Neither the Company nor, to the Company’s Knowledge, any director, officer, agent, employee, Affiliate or Person acting on behalf of the Company is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (“OFAC”); and the Company will not directly or indirectly use the proceeds of the sale of the Shares, or lend, contribute or

otherwise make available such proceeds to any subsidiary, joint venture partner or other Person or entity, towards any sales or operations in Cuba, Iran, Syria, Sudan, Myanmar or any other country sanctioned by OFAC or for the purpose of financing the activities of any Person currently subject to any U.S. sanctions administered by OFAC.

(m) Neither the Company nor, to the Company's Knowledge, any agent or other Person acting on behalf of the Company, has: (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company (or made by any Person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

(n) Internal Accounting Controls. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any differences.

(o) Sarbanes-Oxley; Disclosure Controls. As of the date of the Closing, the Company is an "emerging growth company," as defined in Section 2(a) of the Securities Act. The Company is in compliance in all material respects with all of the provisions of the Sarbanes-Oxley Act of 2002 that are applicable to the Company. The Company has established disclosure controls and procedures (as such term is defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by the Company's most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there has been no change in the Company's internal control over financial reporting (as such term is defined in the Exchange Act) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(p) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filing with the Commission of a registration statement in accordance with the Registration Rights Agreement, (ii)

application(s) to each applicable Trading Market for the listing of the Shares and the Underlying Shares for trading thereon in the time and manner required thereby and (iii) such filings as are required to be made under applicable state and federal securities laws (collectively, the “Required Approvals”).

(q) No Required Additional Issuances. The issuance and sale of the Shares and the Underlying Shares will not obligate the Company to issue shares of Common Stock or other securities to any Person and will not result in a right of any holder of securities of the Company to adjust the exercise, conversion, exchange or reset price under any of such securities.

(r) Application of Takeover Protections; Rights Agreements. The Company and its Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company’s charter documents or the laws of the State of Delaware that is or would reasonably be expected to become applicable to each Purchaser as a result of such Purchaser and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including, without limitation, the Company’s issuance of the Shares, the Underlying Shares and each Purchaser’s ownership of the Shares and the Underlying Shares.

(s) Capitalization. As of the date hereof, there are issued and outstanding 34,148,154 shares of Common Stock, and, after giving effect to the issuance and sale of the Shares hereunder, there will be issued and outstanding 41,384,991 shares of Common Stock, assuming no exercise of outstanding options, warrants or other rights to purchase securities of the Company. As of the date hereof, the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Other than (i) securities issued or issuable pursuant to existing Company equity incentive, stock option or stock purchase plans or agreements disclosed in the SEC Filings and (ii) as set forth in the Company’s most recently filed periodic report under the Exchange Act, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents. All of the outstanding shares of capital stock of the Company are validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Except for the stockholder approval contemplated in Section 4.14 hereof, no further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Shares or the Underlying Shares.

(t) Reservation of Shares of Common Stock. So long as the Preferred Stock remains outstanding, the Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, the maximum number of shares of Common Stock to effect the conversion of the Preferred Stock.

(u) Conversion and Exercise Procedures. The form of Notice of Conversion included in the Certificate of Designation set forth the totality of the procedures required of the Purchasers in order to convert the Preferred Stock. No additional legal opinion, other information or instructions shall be required of the Purchasers to convert their Preferred Stock. The Company shall honor conversions of the Preferred Stock and shall deliver the Underlying Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents, *provided, however*, that the Company shall not be required to issue any shares of Common Stock to a Purchaser upon conversion by such Purchaser (or its assigns) of any shares of the Preferred Stock to the extent (and only to the extent) that such conversion would result in the Purchaser (including its predecessors-in-interest) beneficially owning shares of Common Stock in excess of the applicable Threshold Amount unless approved by the Corporation's stockholders in accordance with the applicable stockholder approval requirements of Nasdaq Marketplace Rule 5635.

(v) Litigation. Other than as may be disclosed in the Company's most recently filed periodic report under the Exchange Act, there is no action, suit, notice of inquiry, violation, Proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action") which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Shares or the Underlying Shares or (ii) would, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. To the knowledge of the Company, there has not been, and there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(w) Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company or any of the Subsidiaries and an unconsolidated or other off balance sheet entity that is required to be disclosed by the Company in its Exchange Act filings and is not so disclosed or that otherwise could be reasonably likely to have a Material Adverse Effect.

(x) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Purchasers to any broker, financial advisor or consultant, finder, placement agent (including the Placement Agent), investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(y) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Shares, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Shares, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other

securities of the Company, other than, in the case of clauses (ii) and (iii), compensation paid to the Placement Agent in connection with the placement of the Securities.

3.2 Representations and Warranties of the Purchasers. Each Purchaser hereby, for itself and for no other Purchaser, represents and warrants as of the date hereof and as of the Closing Date to the Company as follows:

(a) Organization; Authority. Such Purchaser is an entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with the requisite corporate or partnership power and authority to enter into and to consummate the transactions contemplated by the applicable Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement by such Purchaser and performance by such Purchaser of the transactions contemplated by this Agreement have been duly authorized by all necessary corporate or, if such Purchaser is not a corporation, such partnership, limited liability company or other applicable like action, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except as such enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally the enforcement of, creditors' rights and remedies or by other equitable principles of general application.

(b) No Conflicts. The execution, delivery and performance by such Purchaser of this Agreement and the Registration Rights Agreement, if applicable, and the consummation by such Purchaser of the transactions contemplated hereby and thereby will not (i) result in a violation of the organizational documents of such Purchaser, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Purchaser is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Purchaser, except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on the ability of such Purchaser to perform its obligations hereunder.

(c) Investment Intent. Such Purchaser understands that the Shares and the Underlying Shares (collectively, the "Securities") are "restricted securities" and have not been registered under the Securities Act or any applicable state securities law. Such Purchaser is acquiring the Securities as principal for its own account and does not presently have any agreement, plan or understanding, directly or indirectly, with any Person to distribute or effect any distribution of any of the Securities (or any securities which are derivatives thereof) to or through any person or entity; such Purchaser is not a registered broker-dealer under Section 15 of the Exchange Act or an entity engaged in a business that would require it to be so registered as a broker-dealer. Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(d) Purchaser Status. At the time such Purchaser was offered the Securities, it was, and at the date hereof it is, an "accredited investor" as defined in Rule 501(a) under the Securities Act. Purchaser

hereby represents that neither it nor any of its Rule 506(d) Related Parties is a “bad actor” within the meaning of Rule 506(d) promulgated under the Securities Act. For purposes of this Agreement, “**Rule 506(d) Related Party**” shall mean a person or entity covered by the “Bad Actor disqualification” provision of Rule 506(d) of the Securities Act. Such Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(e) **General Solicitation.** Such Purchaser is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general advertisement.

(f) **Access to Information.** Such Purchaser acknowledges and affirms that, with the assistance of its advisors, it has conducted and completed its own investigation, analysis and evaluation related to the investment in the Securities. Such Purchaser has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the Securities. No such investigation, analysis and evaluation nor any other due diligence investigation conducted by such Purchaser shall modify, limit or otherwise affect such Purchaser’s right to rely on the Company’s representations and warranties contained in this Agreement.

(g) **Certain Trading Activities.** Other than with respect to the transactions contemplated herein, since September 22, 2016, neither the Purchaser nor any Affiliate of such Purchaser which (x) had knowledge of the transactions contemplated hereby, (y) has or shares discretion relating to such Purchaser’s investments or trading or information concerning such Purchaser’s investments, including in respect of the Securities, and (z) is subject to such Purchaser’s review or input concerning such Affiliate’s investments or trading (collectively, “**Trading Affiliates**”) has directly or indirectly, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser or Trading Affiliate, effected or agreed to effect any purchases or sales of the securities of the Company (including, without limitation, any Short Sales involving the Company’s securities). Notwithstanding the foregoing, in the case of a Purchaser and/or Trading Affiliate that is, individually or collectively, a multi-managed investment bank or vehicle whereby separate portfolio managers manage separate portions of such Purchaser’s or Trading Affiliate’s assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser’s or Trading Affiliate’s assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio manager that have knowledge about the financing transaction contemplated by this Agreement. Other than to other Persons party to this Agreement, such Purchaser has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction).

(h) **Brokers and Finders.** No Person will have, as a result of the transactions contemplated by this Agreement, any valid right, interest or claim against or upon the Company or any Purchaser for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of the Purchaser other than the fees of Leerink Partners (the “**Placement Agent**”) to be paid by the Company.

(i) Reliance on Exemptions. Such Purchaser understands that the Securities being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Purchaser's compliance with, the representations, warranties, agreements, acknowledgements and understandings of such Purchaser set forth herein in order to determine the availability of such exemptions and the eligibility of such Purchaser to acquire the Securities.

(j) Regulation M. Such Purchaser is aware that the anti-manipulation rules of Regulation M may apply to sales of Common Stock and other activities with respect to the Common Stock by the Purchasers.

(k) Beneficial Ownership. The purchase by such Purchaser of the Securities issuable to it at the Closing will not result in such Purchaser (individually or together with any other Person with whom such Purchaser has identified, or will have identified, itself as part of a "group" in a public filing made with the Commission involving the Company's securities) acquiring, or obtaining the right to acquire, in excess of 19.999% of the outstanding shares of Common Stock or the voting power of the Company on a post transaction basis that assumes that the Closing shall have occurred. Such Purchaser does not presently intend to, alone or together with others, make a public filing with the Commission to disclose that it has (or that it together with such other Persons have) acquired, or obtained the right to acquire, as a result of the Closing (when added to any other securities of the Company that it or they then own or have the right to acquire), in excess of 19.999% of the outstanding shares of Common Stock or the voting power of the Company on a post transaction basis that assumes that the Closing shall have occurred. A Purchaser shall not be deemed to have acquired, or have the right to acquire, any shares of Common Stock in excess of the Beneficial Ownership Limitation (as defined in the Certificate of Designation) prior to the sixty-first (61st) day after the Purchaser's delivery of a Notice of Conversion under the Certificate of Designation. Notwithstanding the foregoing, the Company shall at all times be required to issue the applicable number of shares of Common Stock to a given Purchaser upon the valid conversion by such Purchaser (or its assigns) of shares of Class A Preferred Stock unless and only to the extent that such conversion and related issuance: (i) would result in the aggregate issuance to a given Purchaser (including its predecessors-in-interest) of a number of shares of Common Stock in excess of the applicable Threshold Amount, and (ii) has not been approved by the Company's stockholders in accordance with the stockholder approval requirements of Nasdaq Marketplace Rule 5635.

(l) Residency. Such Purchaser's residence (if an individual) or offices in which its investment decision with respect to the Securities was made (if an entity) are located at the address immediately below such Purchaser's name on its signature page hereto.

The Company and each of the Purchasers acknowledge and agree that no party to this Agreement has made or makes any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in this Article III and the Transaction Documents.

ARTICLE IV.
OTHER AGREEMENTS OF THE PARTIES

Transfer Restrictions.

(a) Compliance with Laws. Notwithstanding any other provision of this Article IV, each Purchaser covenants that the Securities may be disposed of only pursuant to an effective registration statement under, and in compliance with the requirements of, the Securities Act, or pursuant to an available exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, and in compliance with any applicable state and federal securities laws. In connection with any transfer of the Securities other than (i) pursuant to an effective registration statement, (ii) to the Company or (iii) pursuant to Rule 144 (*provided* that the Purchaser provides the Company with reasonable assurances (in the form of seller and, if applicable, broker representation letters) that the securities may be sold pursuant to such rule), the Company may require the Purchaser to provide to the Company an opinion of counsel selected by the Purchaser and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act.

(b)Legends. Any certificates or book entry notations evidencing the Securities shall bear any legend as required by the “blue sky” laws of any state and a restrictive legend in substantially the following form, until such time as they are not required under Section 4.1(c):

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR APPLICABLE STATE SECURITIES LAWS AND ARE SUBJECT TO CERTAIN TRANSFER RESTRICTIONS SET FORTH IN THE SECURITIES PURCHASE AGREEMENT, DATED NOVEMBER 21, 2016 AND A REGISTRATION RIGHTS AGREEMENT, DATED NOVEMBER 21, 2016, IN EACH CASE BY AND AMONG THE COMPANY AND THE STOCKHOLDERS NAMED THEREIN. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OR (B) AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY AND ITS TRANSFER AGENT OR (II) UNLESS SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT.

(c)Removal of Legends. The legend set forth in Section 4.1(b) above shall be removed and the Company shall issue a certificate (or book entry notation, as applicable) without such legend or any other legend to the holder of the applicable Securities upon which it is stamped or issue to such holder by electronic delivery at the applicable balance account at the Depository Trust Company (“**DTC**”), if (i) such Securities are registered for resale under the Securities Act (provided that, if the Purchaser is selling

pursuant to the effective registration statement registering the Securities for resale, the Purchaser agrees to only sell such Securities during such time that such registration statement is effective and not withdrawn or suspended, and only as permitted by such registration statement), (ii) such Securities are sold or transferred pursuant to Rule 144, or (iii) such Securities are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such securities and without volume or manner-of-sale restrictions. Certificates (or book entry notations) for Securities subject to legend removal hereunder may be transmitted by the Transfer Agent to the Purchasers by crediting the DTC account of the Purchaser's broker or other DTC participant as directed by such Purchaser.

(d)Irrevocable Transfer Agent Instructions. The Company shall issue the Irrevocable Transfer Agent Instructions to its transfer agent, and any subsequent transfer agent, in accordance with the terms of this Agreement. The Company represents and warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 4.1(d) (or instructions that are consistent therewith) is required to be given by the Company to its transfer agent in connection with this Agreement other than with respect to the issuance of the Underlying Shares upon a valid conversion of the Preferred Stock, and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the other Transaction Documents and applicable law. The Company acknowledges that a breach by it of its obligations under this Section 4.1(d) will cause irreparable harm to a Purchaser. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 4.1(d) will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 4.1(d), that a Purchaser shall be entitled, in addition to all other available remedies, to an order and/or injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required.

(e)Acknowledgement. Each Purchaser hereunder acknowledges its primary responsibilities under the Securities Act and accordingly will not sell or otherwise transfer the Securities or any interest therein without complying with the requirements of the Securities Act. While the Registration Statement remains effective, any Securities sold by Purchaser will be sold in accordance with the plan of distribution contained in the Registration Statement and in compliance therewith and with the related prospectus delivery requirements unless an exemption therefrom is available. Each Purchaser, severally and not jointly with the other Purchasers, agrees that if it is notified by the Company in writing at any time that the Registration Statement registering the resale of the Securities is not effective or that the prospectus included in such Registration Statement no longer complies with the requirements of Section 10 of the Securities Act, the Purchaser will refrain from selling such Securities until such time as the Purchaser is notified by the Company that such Registration Statement is effective or such prospectus is compliant with Section 10 of the Securities Act, unless such Purchaser is able to, and does, sell such Securities pursuant to an available exemption from the registration requirements of Section 5 of the Securities Act. Both the Company and its Transfer Agent, and their respective directors, officers, employees and agents, may rely on this Section 4.1(e) and each Purchaser hereunder will indemnify and hold harmless each of such persons from any breaches or violations of this Section 4.1(e).

4.2 Furnishing of Information. In order to enable the Purchasers to sell the Securities under Rule 144, until the Purchaser no longer holds any of the Securities, the Company shall use its commercially reasonable efforts to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act. During such period, if the Company is not required to file reports pursuant to the Exchange Act and if requested by the Purchasers, it will prepare and furnish to the Purchasers and make publicly available in accordance with Rule 144(c) such information as is required for the Purchasers to sell the Securities under Rule 144.

4.3 Integration. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that will be integrated with the offer or sale of the Shares in a manner that would require the registration under the Securities Act of the sale of the Shares to the Purchasers, or that will be integrated with the offer or sale of the Shares for purposes of the rules and regulations of any trading market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.

4.4 Securities Laws Disclosure: Publicity. The Company shall not publicly disclose the name of any Purchaser or an Affiliate of any Purchaser, or include the name of any Purchaser or an Affiliate of any Purchaser in any press release or filing with the Commission (other than the Registration Statement) or any regulatory agency or trading market, without the prior written consent of such Purchaser which shall not be unreasonably withheld. The Purchasers acknowledge that the Transaction Documents and other information relating to the transactions contemplated therein and the identity of the Purchasers may be disclosed, including (i) as required in connection with the Company's filing of a Current Report on Form 8-K with the Commission describing the terms of the Transaction Documents (and including as exhibits to such Current Report on Form 8-K the material Transaction Documents (including, without limitation, this Agreement, the Registration Rights Agreement and the Certificate of Designation)), (ii) as required by federal securities law in connection with (A) any registration statement contemplated by the Registration Rights Agreement and (B) the filing of final Transaction Documents (including signature pages thereto) with the Commission and (iii) to the extent such disclosure is required by law, request of the Staff of the Commission or Trading Market regulations, in which case the Company shall provide the Purchasers with prior written notice of such disclosure permitted under this subclause (iii). Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are required to be publicly disclosed by the Company as described in this Section 4.4, such Purchaser will maintain the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction).

4.5 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, in either case solely by

virtue of receiving Shares under the Transaction Documents or under any other written agreement between the Company and the Purchasers.

4.6 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, including this Agreement, or as expressly required by any applicable securities law, the Company covenants and agrees that neither it, nor any other Person acting on its behalf, will provide any Purchaser or its agents or counsel with any information regarding the Company that the Company believes constitutes material non-public information without the express written consent of such Purchaser, unless prior thereto such Purchaser shall have executed a written agreement regarding the confidentiality and use of such information. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. Except with respect to any Purchaser who is or may have one or more representatives serving as a director or observer on the Company's Board of Directors, the Company confirms that, following the filing of the Current Report on Form 8-K as contemplated by Section 4.4 of this Agreement, no Purchaser will be deemed to be in possession of material non-public information concerning the Company (to the extent that such information was provided by the Company prior to the filing of such Form 8-K).

4.7 Use of Proceeds. The Company shall use the net proceeds from the sale of the Shares hereunder for working capital and general corporate purposes. In no event shall the Company use such proceeds for: (a) the satisfaction of any portion of the Company's debt obligations, (b) the redemption of any Common Stock, (c) the settlement of any outstanding litigation or (d) in violation of the FCPA or OFAC regulations.

4.8 Indemnification of Purchasers. Subject to the provisions of this Section 4.8, the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, managers, partners, employees, investment advisers and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, managers, partners, employees, investment advisers (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "**Purchaser Party**") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any material breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against a Purchaser Party in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is based upon a breach of such Purchaser's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser may have with any such stockholder or any violations by the Purchaser of state or federal securities laws or any conduct by such Purchaser which constitutes fraud, gross negligence, willful misconduct or malfeasance). Promptly after receipt by any Purchaser Party (the "**Indemnified**

Person”) of notice of any demand, claim or circumstances which would or might give rise to a claim or the commencement of any action, Proceeding or investigation in respect of which indemnity may be sought pursuant to this Section 4.8, such Indemnified Person shall promptly notify the Company in writing and the Company shall assume the defense thereof, including the employment of counsel reasonably satisfactory to such Indemnified Person, and shall assume the payment of all fees and expenses; provided, however, that the failure of any Indemnified Person so to notify the Company shall not relieve the Company of its obligations hereunder except to the extent that the Company is actually and materially prejudiced by such failure to notify. In any such Proceeding, any Indemnified Person shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless: (i) the Company and the Indemnified Person shall have mutually agreed to the retention of such counsel; (ii) the Company shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Person in such Proceeding; or (iii) in the reasonable judgment of counsel to such Indemnified Person, representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. The Company shall not be liable for any settlement of any Proceeding effected without its written consent, which consent shall not be unreasonably withheld, delayed or conditioned. Without the prior written consent of the Indemnified Person, which consent shall not be unreasonably withheld, delayed or conditioned, the Company shall not effect any settlement of any pending or threatened Proceeding in respect of which any Indemnified Person is or could have been a party and indemnity could have been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Person from all liability arising out of such Proceeding. The indemnity agreements contained herein shall not be an exclusive remedy but shall be in addition to any cause of action or similar right in law or in equity of any Purchaser Party against the Company or others, and (y) any liabilities the Company may be subject to pursuant to law.

4.9 Trading Market Listing. The Company will use its best efforts to effect and maintain the listing of the Common Stock on the Trading Market. The Company will use its commercially reasonable efforts to effect and maintain the listing of the Common Stock on the NASDAQ Stock Market for so long as any Securities are owned by the Purchasers.

4.10 Form D; Blue Sky. The Company agrees to timely file a Form D with respect to the Shares as required under Regulation D and to provide a copy thereof, promptly upon the written request of any Purchaser. The Company, on or before the Closing Date, shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for or to qualify the Shares for sale to the Purchasers under applicable securities or “Blue Sky” laws of the states of the United States (or to obtain an exemption from such qualification) and shall provide evidence of such actions promptly upon the written request of any Purchaser.

4.11 Common Stock Reserve. From the date hereof to the date on which the Purchasers has exercised its rights in full under the Certificate of Designations, the Company shall reserve for issuance to the Purchasers a number of shares of Common Stock at least equal to the number of Underlying Shares.

4.12 Short Sales and Confidentiality After The Date Hereof. Such Purchaser shall not, and shall cause its Trading Affiliates not to, engage, directly or indirectly, in any transactions in the Company's securities (including, without limitation, any Short Sales involving the Company's securities) during the period from the date hereof until the earlier of such time as (i) the transactions contemplated by this Agreement are first publicly announced as required by and described in Section 4.4 or (ii) this Agreement is terminated in full pursuant to Section 6.17. Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company as described in Section 4.4, such Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in the Transaction Documents. Notwithstanding the foregoing, in the event that a Purchaser is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the representation set forth above shall apply only with respect to the portion of assets managed by the portfolio manager that have knowledge about the financing transaction contemplated by this Agreement.

4.13 Proxy Statement.

(a) In connection with its 2017 annual meeting of stockholders, the Company shall prepare and file with the Commission a definitive proxy statement (the "Proxy Statement").

(b) The Proxy Statement shall include a proposal to permit the Preferred Stock to become convertible into shares of Common Stock as set forth in, and to the extent permitted by the Certificate of Designation, and the issuance of the Underlying Shares upon such conversion, which issuance of shares, when aggregated with the Common Stock, may exceed 20% of the outstanding Common Stock prior to the date of this Agreement (the "Proposal"). The Proxy Statement shall include the recommendation of the Board to its stockholders that they vote in favor of adoption of the foregoing proposal.

(c) The Company shall give counsel to the Purchasers a reasonable opportunity to review and comment on the Proxy Statement each time before that document (or any amendment or supplement thereto) is filed with the Commission, and reasonable and good faith consideration shall be given to any comments made by counsel. The Company shall (i) promptly provide such counsel with any comments or other communications, whether written or oral, that the Company may receive from the Commission or its staff with respect to the Proxy Statement promptly after receipt of those comments or other communications and (ii) provide such counsel with a reasonable opportunity to participate in the response to those comments and to provide comments on that response (to which reasonable and good faith consideration shall be given), including by participating in any discussions or meetings with the Commission. Thereafter, the Company shall promptly respond to such comments and file any amendments thereto.

(d) If the stockholders do not approve such Proposal at the 2017 annual meeting of stockholders, then in connection with each subsequent annual meeting of stockholders until the Proposal is approved by the Company's stockholders, the Company shall prepare and file with the Commission a definitive proxy statement which includes the Proposal, and give Purchasers' counsel opportunity to review and comment on such definitive proxy statement as set forth in subsection (c) above.

ARTICLE V.
CONDITIONS PRECEDENT TO CLOSING

5.1 Conditions Precedent to the Obligations of the Purchasers to Purchase Shares. The obligation of each Purchaser to acquire Shares at the Closing is subject to the fulfillment to such Purchaser's satisfaction, on or prior to the Closing Date, of each of the following conditions, any of which may be waived by such Purchaser (as to itself only):

(a) Representations and Warranties. The representations and warranties of the Company contained herein shall be true and correct in all material respects (except for those representations and warranties which are qualified as to materiality, in which case such representations and warranties shall be true and correct in all respects) as of the date when made and as of the Closing Date, as though made on and as of such date, except for such representations and warranties that speak as of a specific date.

(b) Performance. The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by it at or prior to the Closing.

(c) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

(d) Consents. The Company shall have obtained in a timely fashion any and all consents, Permits, approvals, registrations and waivers necessary for consummation of the purchase and sale of the Shares (including all Required Approvals), all of which shall be and remain so long as necessary in full force and effect.

(e) Listing. The NASDAQ Global Market shall have approved the listing of additional shares application for the Securities.

(f) No Suspensions of Trading in Common Stock. The Common Stock shall not have been suspended, as of the Closing Date, by the Commission or the Trading Market from trading on the Trading Market nor shall suspension by the Commission or the Trading Market have been threatened, as of the Closing Date, either (A) in writing by the Commission or the Trading Market or (B) by falling below the minimum listing maintenance requirements of the Trading Market.

(g) Company Deliverables. The Company shall have delivered the Company Deliverables in accordance with Section 2.2(a).

(h) Compliance Certificate. The Company shall have delivered to each Purchaser a certificate, dated as of the Closing Date and signed by its Chief Executive Officer or its Chief Financial Officer, dated as of the Closing Date, certifying to the fulfillment of the conditions specified in Sections 5.1(a) and (b) in the form attached hereto as Exhibit E.

(i) Termination. This Agreement shall not have been terminated in accordance with Section 6.16 herein.

(j) Reservation of Shares of Common Stock. As of the Closing Date, the Company shall have reserved out of its authorized and unissued Common Stock, solely for the purpose of effecting the conversion of the Preferred Stock, a number of shares of Common Stock equal to the number of Underlying Shares issuable upon conversion of the Preferred Stock.

5.2 Conditions Precedent to the Obligations of the Company to Sell Shares. The Company's obligation to sell and issue the Shares at the Closing to the Purchasers is subject to the fulfillment to the satisfaction of the Company on or prior to the Closing Date of the following conditions, any of which may be waived by the Company:

(a) Representations and Warranties. The representations and warranties made by the Purchasers in Section 3.2 hereof shall be true and correct in all material respects (except for those representations and warranties which are qualified as to materiality, in which case such representations and warranties shall be true and correct in all respects) as of the date when made, and as of the Closing Date as though made on and as of such date, except for representations and warranties that speak as of a specific date.

(b) Performance. Such Purchaser shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by such Purchaser at or prior to the Closing Date.

(c) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

(d) Consents. The Company shall have obtained in a timely fashion any and all consents, Permits, approvals, registrations and waivers necessary for consummation of the purchase and sale of the Shares, all of which shall be and remain so long as necessary in full force and effect.

(e) Purchasers Deliverables. Such Purchaser shall have delivered its Purchaser Deliverables in accordance with Section 2.2(b).

Tel: (858) 875-1800
Attention: Cindy R. Tahl

[Email]

With a copy to: Goodwin Procter LLP
3 Embarcadero Center
San Francisco, CA 94111
Telephone No.: [redacted]
Attention: Maggie Wong and Mitzi Chang
[E-mail]

If to a Purchaser: To the address set forth under such Purchaser's name on the signature page hereof, or such other address as may be designated in writing hereafter, in the same manner, by such Person.

With a copy to: Seward & Kissel LLP
One Battery Park Plaza
New York, NY 10004
Telephone No.: [redacted]
Attention: Keith Billotti
[E-mail]

6.4 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company, Redmile Group, LLC and the holders of a majority in interest of the Shares still held by the Purchasers, in the case of a waiver, by the party against whom enforcement of any such waiver is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

6.5 Construction. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party. This Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement or any of the Transaction Documents.

6.6 Successors and Assigns. The provisions of this Agreement shall inure to the benefit of and be binding upon the parties and their successors and permitted assigns. This Agreement, or any rights or obligations hereunder, may not be assigned by the Company without the prior written consent of each Purchaser. Any Purchaser may assign its rights hereunder in whole or in part to any Person to whom such Purchaser assigns or transfers any Shares in compliance with the Transaction Documents and applicable law,

provided such transferee shall agree in writing to be bound, with respect to the transferred Shares, by the terms and conditions of this Agreement that apply to “Purchaser”.

6.7 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except each Purchaser Party is an intended third party beneficiary of Section 4.8.

6.8 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective Affiliates, employees or agents) shall be commenced exclusively in the New York Courts. Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any Proceeding, any claim that it is not personally subject to the jurisdiction of any such New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.**

6.9 Survival. Subject to applicable statute of limitations, the representations, warranties, agreements and covenants contained herein shall survive the Closing and the delivery of the Securities.

6.10 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission, or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile signature page were an original thereof.

6.11 Severability. If any provision of this Agreement is held to be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Agreement shall not in any way be affected or impaired thereby and the parties will attempt to agree upon a valid and enforceable

provision that is a reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Agreement.

6.12 Replacement of Shares. If any certificate or instrument evidencing any Shares is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof, or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company and the Transfer Agent of such loss, theft or destruction and the execution by the holder thereof of a customary lost certificate affidavit of that fact and an agreement to indemnify and hold harmless the Company and the Transfer Agent for any losses in connection therewith or, if required by the Transfer Agent, a bond in such form and amount as is required by the Transfer Agent. The applicants for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs associated with the issuance of such replacement Shares. If a replacement certificate or instrument evidencing any Shares is requested due to a mutilation thereof, the Company may require delivery of such mutilated certificate or instrument as a condition precedent to any issuance of a replacement.

6.13 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to seek specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations described in the foregoing sentence and hereby agree to waive in any action for specific performance of any such obligation (other than in connection with any action for a temporary restraining order) the defense that a remedy at law would be adequate.

6.14 Adjustments in Share Numbers and Prices. In the event of any stock split, subdivision, dividend or distribution payable in shares of Common Stock (or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly shares of Common Stock), combination or other similar recapitalization or event occurring after the date hereof and prior to the Closing, each reference in any Transaction Document to a number of shares or a price per share shall be deemed to be amended to appropriately account for such event.

6.15 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance of the obligations of any other Purchaser under any Transaction Document. The decision of each Purchaser to purchase Shares pursuant to the Transaction Documents has been made by such Purchaser independently of any other Purchaser and independently of any information, materials, statements or opinions as to the business, affairs, operations, assets, properties, liabilities, results of operations, condition (financial or otherwise) or prospects of the Company or any subsidiary which may have been made or given by any other Purchaser or by any agent or employee of any other Purchaser, and no Purchaser and any of its agents or employees shall have any liability to any other Purchaser (or any other Person) relating to or arising from any such information, materials, statement or opinions. Nothing contained herein or in any Transaction Document, and no action taken by any Purchaser pursuant thereto, shall be deemed to constitute the Purchasers as a partnership, an

association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser acknowledges that no other Purchaser has acted as agent for such Purchaser in connection with making its investment hereunder and that no Purchaser will be acting as agent of such Purchaser in connection with monitoring its investment in the Shares or enforcing its rights under the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights, including without limitation the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any Purchaser.

6.16 Cooperation of the Parties. Each of the Company and the Purchasers agree that they will use their commercially reasonable efforts to close the transaction contemplated hereby by the Closing Date. The Company and the Purchasers further agree that they shall each provide reasonable cooperation to the other party for all necessary filings made by the Company and/or the Purchaser incident to the transactions contemplated hereby, whether before or after the Closing Date.

6.17 Termination. This Agreement may be terminated and the sale and purchase of the Shares abandoned at any time prior to the Closing by either the Company or any Purchaser (with respect to itself only) upon written notice to the other, if the Closing has not been consummated on or prior to 5:00 P.M., New York City time, on the thirtieth (30th) day after the date of this Agreement; *provided, however*, that the right to terminate this Agreement under this Section 6.17 shall not be available to any Person whose failure to comply with its obligations under this Agreement has been the cause of or resulted in the failure of the Closing to occur on or before such time. Nothing in this Section 6.17 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents. In the event of a termination pursuant to this Section 6.17, the Company shall promptly notify all non-terminating Purchasers.

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IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

FATE THERAPEUTICS, INC.

By: /s/ J. Scott Wolchko

Name: J. Scott Wolchko

Title: President
and Chief
Executive
Officer

NAME OF PURCHASER:

Redmile Capital Fund, LP

By: /s/ Jeremy Green _____

Jeremy Green

Title Managing Member of the General Partner and the Investment Manager

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 223,663

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$2,974,717.90

NAME OF PURCHASER:

Redmile Capital Offshore Fund, Ltd.

By: /s/ Jeremy Green _____
Jeremy Green
Title Managing Member of the Investment Manager

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 302,862

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 4,028,064.60

NAME OF PURCHASER:

Redmile Capital Offshore Fund II, Ltd.

By: /s/ Jeremy Green _____
Jeremy Green
Title Managing Member of the Investment Manager

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 1,712,110

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 22,771,063.00

NAME OF PURCHASER:

Redmile Special Opportunities Fund, Ltd.

By: /s/ Jeremy Green _____
Jeremy Green
Title Managing Member of the Investment Manager

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 55,747

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 741,435.10

NAME OF PURCHASER:

Redmile Capital Offshore Fund (ERISA), Ltd.

By: /s/ Jeremy Green _____
Jeremy Green
Title Managing Member of the Investment Manager

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 33,441

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 444,765.30

NAME OF PURCHASER:

Redmile Biopharma Investments I, L.P.

By: /s/ Jeremy Green _____
Jeremy Green
Title Managing Member of the General Partner and/or Management Company

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 342,422

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 4,554,212.60

NAME OF PURCHASER:

P Redmile, Ltd.

By: /s/ Jeremy Green _____

Jeremy Green

Title Managing Member of Redmile Group, LLC, Investment Adviser to P Redmile, Ltd.

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 30,121

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 400,609.30

NAME OF PURCHASER:

LMA SPC for and o/b/o MAP 20 Segregated Portfolio

By: /s/ Jeremy Green
Jeremy Green

Title Managing Member of Redmile Group, LLC, Investment Adviser to LMA SPC for and o/b/o MAP 20 Segregated Portfolio

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock _____

Shares of Class A Preferred Stock 119,183

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 1,585,133.90

NAME OF PURCHASER:

BIOTECHNOLOGY VALUE FUND II, LP

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor
San Francisco, CA 94104

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 1,105,088

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 2,939,534.08

NAME OF PURCHASER:

BIOTECHNOLOGY VALUE TRADING FUND OS L.P

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor

San Francisco, CA 94104

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 331,022

Shares of Class A Preferred Stock

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 880,518.52

NAME OF PURCHASER:

INVESTMENT 10, L.L.C.

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor
San Francisco, CA 94104

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 177,801

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 472,950.66

NAME OF PURCHASER:

MSI BVF SPV, L.L.C.

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor

San Francisco, CA 94104

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 429,876

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 1,143,470.16

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

NAME OF PURCHASER:

Franklin Templeton Investment Funds – Franklin Biotechnology Discovery Fund

By: Franklin Advisers, Inc., as investment manager

By: /s/ Evan McCulloch

Name: Evan McCulloch

Title: Vice President

Address:

c/o Franklin Advisers, Inc., One Franklin Parkway, San Mateo, California 94403

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 462,302

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 1,229,723.320

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

NAME OF PURCHASER:

Franklin Strategic Series – Franklin Biotechnology Discovery Fund

By: Franklin Advisers, Inc., as investment manager

By: /s/ Evan McCulloch

Name: Evan McCulloch

Title: Vice President

Address:

c/o Franklin Advisers, Inc., One Franklin Parkway, San Mateo, California 94403

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 289,577

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 770,274.82

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

NAME OF PURCHASER:

EcoR1 Capital Fund Qualified, LP

By: /s/ Oleg Nodelman

Name: Oleg Nodelman

Title: Manager, EcoR1 Capital LLC, as GP

Address:

409 Illinois Street, San Francisco, CA 94158

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 1,400,376

Shares of Class A Preferred Stock

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 3,725,000.16

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

NAME OF PURCHASER:

EcoR1 Capital Fund, LP

By: /s/ Oleg Nodelman
Name: Oleg Nodelman
Title: Manager, EcoR1 Capital LLC, as GP

Address:
409 Illinois Street, San Francisco, CA 94158

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 479,323

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 1,274,999.18

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

**NAME OF PURCHASER:
SARAH GORDON WILD**

By: /s/ Sarah Gordon Wild
Name: Sarah Gordon Wild

Address: [address]
[address]

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 375,939

Shares of Class A Preferred Stock _____

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 999,997.74

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

NAME OF PURCHASER:

THE INVESTMENT 2002 TRUST DATED 11/11/02

By: /s/ William H. Rastetter

Name: William H. Rastetter

Title: Trustee

Address: [address]

[address]

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 375,939

Shares of Class A Preferred Stock

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 999,997.74

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

**NAME OF PURCHASER:
TIMOTHY P. COUGHLIN**

By: /s/ Timothy P. Coughlin

Name: Timothy P. Coughlin

Address: [address]

[address]

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 56,390

Shares of Class A Preferred Stock

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 149,997.40

IN WITNESS WHEREOF, the parties have executed this Securities Purchase Agreement as of the date first written above.

NAME OF PURCHASER:

Chris M. Storgard and Melinda Storgard as trustees of the Storgard Family Trust, June 28, 2012

By: /s/ Chris Mark Anderson Storgard

Name: Chris Mark Anderson Storgard

Address: [address]

[address]

NUMBER OF SHARES TO BE ACQUIRED

Shares of Common Stock 37,593

Shares of Class A Preferred Stock

AGGREGATE PURCHASE PRICE (SUBSCRIPTION AMOUNT): \$ 99,997.38

EXHIBITS:

- A: Form of Registration Rights Agreement
 - B: Form of Opinion of Company Counsel
 - C: Form of Irrevocable Transfer Agent Instructions
 - D: Form of Secretary's Certificate
 - E: Form of Officer's Certificate
 - F: Wire Instructions
 - G: Form of Certificate of Designation
-

EXHIBIT A

FORM OF REGISTRATION RIGHTS AGREEMENT

EXHIBIT B

FORM OF OPINION OF COMPANY COUNSEL

EXHIBIT C

FORM OF IRREVOCABLE TRANSFER AGENT INSTRUCTIONS

As of November [], 2016

American Stock Transfer & Trust Company, LLC
6201 15th Avenue
Brooklyn, NY 11219
Attn: Tiffany Thompson

Ladies and Gentlemen:

Reference is made to that certain Securities Purchase Agreement, dated as of November 21, 2016 (the "**Agreement**"), by and among Fate Therapeutics, Inc., a Delaware corporation (the "**Company**"), and the purchasers named on the signature pages thereto (collectively, and including permitted transferees, the "**Holders**"), pursuant to which the Company is issuing to the Holders an aggregate of 7,236,837 shares of Common Stock of the Company, par value \$0.001 per share (the "**Common Stock**"), and an aggregate of 2,819,549 shares of Class A Preferred Stock, par value \$0.001 per share (the "**Preferred Stock**") and in the future may issue an aggregate of 14,097,745 shares of Common Stock, which is subject to adjustment, upon conversion of the Preferred Stock (the "**Underlying Shares**") and together with the Common Stock and the Preferred Stock, the "**Securities**").

You are hereby irrevocably instructed to issue, register and deliver the shares of Common stock and Preferred Stock in the denominations and the names as are specified in Exhibit 1 attached hereto. The Common Stock and the Preferred Stock shall be issued in book entry form with the following legend:

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR APPLICABLE STATE SECURITIES LAWS AND ARE SUBJECT TO CERTAIN TRANSFER RESTRICTIONS SET FORTH IN THE SECURITIES PURCHASE AGREEMENT, DATED NOVEMBER 21, 2016 AND A REGISTRATION RIGHTS AGREEMENT, DATED NOVEMBER 21, 2016, IN EACH CASE BY AND AMONG THE COMPANY AND THE STOCKHOLDERS NAMED THEREIN. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OR (B) AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY AND ITS TRANSFER AGENT OR (II) UNLESS SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT.

Upon the Company's receipt of a Holder's duly completed and executed Notice of Conversion as set forth in Annex A to the Company's Certificate of Designation of Preferences Rights and Limitations of Class A Convertible Stock dated November [], 2016, the Company shall issue to American Stock Transfer & Trust Company, LLC (the "**Transfer Agent**") a legal opinion signed by its counsel authorizing the issuance of the certain number of shares of the Company's Class A Preferred Stock set forth in the Notice of Conversion to be converted into the Company's Common Stock and setting forth the transfer restrictions and legends, if any, to be attached to the Underlying Shares (the "**Legal Opinion**"). If the converting Holder has

been issued a physical stock certificate for its Class A Preferred Stock (the “**Stock Certificate**”), such Holder shall mail the physical copy of such Stock Certificate to the Transfer Agent along with an instruction letter specifying (i) the number of shares of Class A Preferred Stock to be converted into Underlying Shares and (ii) whether they would like their remaining Class A Preferred Stock (if any) kept in book entry or certificated form (the “**Instruction Letter**”). Once the Company has received such Notice of Conversion from the Holder, and the Transfer Agent has received the Legal Opinion from the Company’s legal counsel and the Stock Certificate (if any) and the Instruction Letter from the Holder, the Transfer Agent shall process such Underlying Shares consistent with the conversion mechanics and timing outlined in Section 6(e) of the Certificate of Designation.

You acknowledge and agree that so long as you have received (a) written confirmation from the Company’s legal counsel that either (1) a registration statement covering resales of the Securities has been declared effective by the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), or (2) the Securities have been sold in conformity with Rule 144 under the Securities Act (“**Rule 144**”) or are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such securities and without volume or manner-of-sale restrictions and (b) if applicable, a copy of such registration statement, then, unless otherwise required by law, within three (3) Trading Days of your receipt of written confirmation of (1) or (2) above, you shall remove any restrictive legend or stop transfer order and/or transfer the Securities registered in the names of Purchasers to the applicable transferee and such Securities shall not bear any legend restricting transfer of the Securities thereby and should not be subject to any stop-transfer restriction; *provided, however*, that if such Securities are not registered for resale under the Securities Act or able to be sold under Rule 144 without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such securities and without volume or manner-of-sale restrictions, then such Securities shall remain legended.

A form of written confirmation from the Company’s outside legal counsel that a registration statement covering resales of the Securities has been declared effective by the Commission under the Securities Act is attached hereto as Annex I.

Please be advised that the Holders are relying upon this letter as an inducement to enter into the Agreement and, accordingly, each Holder is a third party beneficiary to these instructions.

Please execute this letter in the space indicated to acknowledge your agreement to act in accordance with these instructions.

[Signature Page Follows.]



FATE THERAPEUTICS, INC. Very truly yours,

By: _____ Name:
Title: _____

Acknowledged and Agreed:

AMERICAN STOCK TRANSFER & TRUST COMPANY, LLC

By: _____

Name: _____

Title: _____

Date: _____, _____

EXHIBIT 1

Name of Purchaser	Number of Shares of Common Stock	Number of Shares of Preferred Stock	Address of Record	Tax ID number
Redmile Biopharma Investments I, L.P.		342,422	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Redmile Capital Offshore Fund II, Ltd.		1,712,110	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Redmile Capital Fund, LP		223,663	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Redmile Capital Offshore Fund, Ltd.		302,862	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Redmile Special Opportunities Fund, Ltd.		55,747	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Redmile Capital Offshore Fund (ERISA), Ltd.		33,441	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted

P Redmile Ltd.		30,121	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Map 20 Segregated Portfolio, a segregated portfolio of LMA SPC		119,183	c/o Redmile Group, LLC One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129 Attention: Josh Garcia [email]	redacted
Biotechnology Value Trading Fund OS, L.P	331,022		The Depository Trust Company 570 Washington Blvd - 5th floor Jersey City, NJ 07310 Attn: BNY Mellon/Branch Deposit Department for the account of Biotechnology Value Trading Fund OS LP	redacted
Biotechnology Value Fund, LP	1,715,611		The Depository Trust Company 570 Washington Blvd - 5th floor Jersey City, NJ 07310 Attn: BNY Mellon/Branch Deposit Department for the account of Biotechnology Value Fund LP	redacted
Biotechnology Value Fund II, LP	1,105,088		The Depository Trust Company 570 Washington Blvd - 5th floor Jersey City, NJ 07310 Attn: BNY Mellon/Branch Deposit Department for the account of Biotechnology Value Fund II, LP	redacted
MSI BVF SPV LLC	429,876		BNP Paribas Prime Brokerage Attn: Jose Nevarez 787 Seventh Avenue, 8th Floor New York, NY 10019 [telephone number] [email]	redacted
Investment 10, LLC	177,801		The Depository Trust Company 570 Washington Blvd - 5th floor Jersey City, NJ 07310 Attn: BNY Mellon/Branch Deposit Department for the account of Investment 10 LLC	redacted
EcoR1 Capital Fund Qualified, LP	1,400,376		409 Illinois Street, San Francisco, CA 94158	redacted
EcoR1 Capital Fund, LP	479,323		409 Illinois Street, San Francisco, CA 94158	redacted

Franklin Templeton Investment Funds – Franklin Biotechnology Discovery Fund	462,302		One Franklin Parkway, San Mateo, California 94403, Attn: Christopher Lee [telephone number] and Christopher Chen [telephone number];	redacted
Franklin Strategic Series – Franklin Biotechnology Discovery Fund	289,577		One Franklin Parkway, San Mateo, California 94403, Attn: Christopher Lee [telephone number] and Christopher Chen [telephone number];	redacted
Sarah Gordon Wild	375,939		Attn: Sarah Wild [address] [address]	redacted
THE INVESTMENT 2002 TRUST DATED 11/11/02	375,939		Attn: Bill Rastetter [address] [address]	redacted
Timothy P. Coughlin	56,390		[address] [address]	redacted
Storgard Family Trust, June 28, 2012	37,593		[address] [address]	redacted

Annex I

FORM OF NOTICE OF EFFECTIVENESS OF REGISTRATION STATEMENT

American Stock Transfer & Trust Company, LLC
6201 15th Avenue
Brooklyn, NY 11219
Attn: Tiffany Thompson

Re: Fate Therapeutics, Inc.

Ladies and Gentlemen:

We are counsel to Fate Therapeutics, Inc., a Delaware corporation (the "**Company**"), and have represented the Company in connection with that certain Securities Purchase Agreement, dated as of November 21, 2016, entered into by and among the Company and the purchasers named therein (collectively, the "**Purchasers**") pursuant to which the Company issued to the Purchasers shares of the Company's common stock, \$0.001 par value per share (the "**Common Stock**"), and shares of Class A Preferred Stock, par value \$0.001 per share (the "**Preferred Stock**") set forth below such Purchaser's name on the signature page of this Agreement (which aggregate amount for all Purchasers together shall be [] shares of Common Stock and [] shares of Preferred Stock, and shall be collectively referred to herein as the "**Shares**"). Pursuant to that certain Registration Rights Agreement of even date (the "**Registration Rights Agreement**"), the Company agreed to register the resale of certain of the shares of the Common Stock and the Common Stock issued or issuable upon conversion of the Preferred Stock (the "**Underlying Shares**" and together with the Common Stock, the "**Registrable Securities**"), under the Securities Act of 1933, as amended (the "**Securities Act**"). In connection with the Company's obligations under the Registration Rights Agreement, on _____, _____, the Company filed a Registration Statement on Form S-3 (File No. 333-) (the "**Registration Statement**") with the Securities and Exchange Commission (the "**Commission**") relating to the Registrable Securities which names each of the Purchasers party to the Registration Rights Agreement as a selling stockholder thereunder.

In connection with the foregoing, we advise you that a member of the Commission's staff has advised us by telephone that the Commission has entered an order declaring the Registration Statement effective under the Securities Act at _____ [a.m.][p.m.] on _____, _____, and we have no knowledge, after telephonic inquiry of a member of the staff, that any stop order suspending its effectiveness has been issued or that any proceedings for that purpose are pending before, or threatened by, the Commission and the Registrable Securities are available for resale under the Securities Act pursuant to the Registration Statement.

This letter shall serve as our standing notice to you that the Common Stock may be freely transferred by the Purchasers pursuant to the Registration Statement. You need not require further letters from us to effect any future legend-free issuance or reissuance of shares of Common Stock to the Purchasers or the transferees of the Purchasers, as the case may be, as contemplated by the Company's Irrevocable Transfer Agent Instructions dated November 21, 2016, provided at the time of such reissuance,

the Company has not otherwise notified you that the Registration Statement is unavailable for the resale of the Registrable Securities. This letter shall serve as our standing instructions with regard to this matter.

Very truly yours,

Goodwin Procter LLP

By: _____

EXHIBIT D

FORM OF SECRETARY'S CERTIFICATE

The undersigned hereby certifies that she is the duly elected, qualified and acting Secretary of Fate Therapeutics, Inc. a Delaware corporation (the "**Company**"), and that as such she is authorized to execute and deliver this certificate in the name and on behalf of the Company and in connection with the Securities Purchase Agreement, dated as of November 21, 2016, by and among the Company and the investors party thereto (the "**Securities Purchase Agreement**"), and further certifies in her official capacity, in the name and on behalf of the Company, the items set forth below. Capitalized terms used but not otherwise defined herein shall have the meaning set forth in the Securities Purchase Agreement.

1. Attached hereto as Exhibit A is a true, correct and complete copy of the resolutions duly adopted by the Board of Directors of the Company by unanimous written consent on November ____, 2016. Such resolutions have not in any way been amended, modified, revoked or rescinded, have been in full force and effect since their adoption to and including the date hereof and are now in full force and effect.
2. Attached hereto as Exhibit B is a true, correct and complete copy of the Amended and Restated Certificate of Incorporation of the Company, together with any and all amendments thereto currently in effect, and no action has been taken to further amend, modify or repeal such Certificate of Incorporation, the same being in full force and effect in the attached form as of the date hereof.
3. Attached hereto as Exhibit C is a true, correct and complete copy of the Amended and Restated Bylaws of the Company and any and all amendments thereto currently in effect, and no action has been taken to further amend, modify or repeal such Bylaws, the same being in full force and effect in the attached form as of the date hereof.
4. Each person listed below has been duly elected or appointed to the position(s) indicated opposite his name and is duly authorized to sign the Securities Purchase Agreement and each of the Transaction Documents on behalf of the Company, and the signature appearing opposite such person's name below is such person's genuine signature.

<u>Name</u>	<u>Position</u>	<u>Signature</u>
J. Scott Wolchko	President and Chief Executive Officer	_____

IN WITNESS WHEREOF, the undersigned has hereunto set her hand as of this ____ day of November, 2016.

Cindy R. Tahl
Secretary

I, J. Scott Wolchko, President and Chief Executive Officer, hereby certify that Cindy R. Tahl is the duly elected, qualified and acting Secretary of the Company and that the signature set forth above is her true signature.

J. Scott Wolchko
President and Chief Executive Officer

EXHIBIT A

Resolutions

EXHIBIT B

Certificate of Incorporation

EXHIBIT C

Bylaws

EXHIBIT E

FORM OF OFFICER'S CERTIFICATE

The undersigned, the Chief Executive Officer of Fate Therapeutics, Inc., a Delaware corporation (the "**Company**"), pursuant to Section 5.1(h) of the Securities Purchase Agreement, dated as of November 21, 2016, by and among the Company and the investors signatory thereto (the "**Securities Purchase Agreement**"), hereby represents, warrants and certifies as follows (capitalized terms used but not otherwise defined herein shall have the meaning set forth in the Securities Purchase Agreement):

1. The representations and warranties of the Company contained in the Securities Purchase Agreement are true and correct in all material respects (except for those representations and warranties which are qualified as to materiality, in which case, such representations and warranties shall be true and correct in all respects) as of the date when made and as of the date hereof, as though made on and as of such date, except for such representations and warranties that speak as of a specific date.
2. The Company has performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by it at or prior to the date hereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has executed this Officer's Certificate this ____ day of November, 2016.

J. Scott Wolchko
President and Chief Executive Officer

EXHIBIT F

WIRE INSTRUCTIONS

EXHIBIT G

FORM OF CERTIFICATE OF DESIGNATION

**FATE THERAPEUTICS, INC.
CERTIFICATE OF DESIGNATION OF PREFERENCES,
RIGHTS AND LIMITATIONS**

OF

CLASS A CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTION 151 OF THE
DELAWARE GENERAL CORPORATION LAW

FATE THERAPEUTICS, INC., Delaware corporation (the “**Corporation**”), in accordance with the provisions of Section 103 of the Delaware General Corporation Law (the “**DGCL**”) does hereby certify that, in accordance with Sections 141(c) and 151 of the DGCL, the following resolution was duly adopted by the Board of Directors of the Corporation on November 21, 2016:

RESOLVED, pursuant to authority expressly set forth in the Amended and Restated Certificate of Incorporation of the Corporation (the “**Certificate of Incorporation**”), the issuance of a series of Preferred Stock designated as the Class A Convertible Preferred Stock, par value \$0.001 per share, of the Corporation is hereby authorized and the designation, number of shares, powers, preferences, rights, qualifications, limitations and restrictions thereof (in addition to any provisions set forth in the Certificate of Incorporation that are applicable to the Preferred Stock of all classes and series) are hereby fixed, and the Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock is hereby approved as follows:

CLASS A CONVERTIBLE PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“**Affiliate**” means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the Securities Act of 1933. With respect to a Holder, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such Holder will be deemed to be an Affiliate of such Holder.

“**Business Day**” means any day except Saturday, Sunday, any day which shall be a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“**Commission**” means the U.S. Securities and Exchange Commission.

“**Common Stock**” means the Corporation’s common stock, par value \$0.001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified into.

“**Conversion Price**” for the Class A Preferred Stock shall be \$2.66, subject to adjustment as provided herein.

“**Conversion Shares**” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Class A Preferred Stock in accordance with the terms hereof.

“**DGCL**” shall mean the Delaware General Corporation Law.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Holder**” means any holder of Class A Preferred Stock.

“**Issuance Date**” means the first date on which any shares of Class A Preferred Stock are issued by the Corporation.

“**Person**” means any individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“**Stated Value**” means \$13.30 per share, subject to increase as set forth in Section 3 below.

“**Threshold Amount**” means 19.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock pursuant to an applicable Notice of Conversion.

“**Trading Day**” means a day on which the Common Stock is traded for any period on a principal securities exchange or if the Common Stock is not traded on a principal securities exchange, on a day that the Common Stock is traded on another securities market on which the Common Stock is then being traded.

Section 2. Designation, Amount and Par Value; Assignment.

(a) The series of preferred stock designated by this Certificate of Designation shall be designated as the Corporation’s Class A Convertible Preferred Stock (the “**Class A Preferred Stock**”) and the number of shares so designated shall be 2,819,549. The Class A Preferred Stock shall have a par value of \$0.001 per share.

(b) The Corporation shall register shares of the Class A Preferred Stock, upon records to be maintained by the Corporation for that purpose (the “**Class A Preferred Stock Register**”), in the name of the Holders thereof from time to time. The Corporation may deem and treat the registered Holder of shares of Class A Preferred Stock as the absolute owner thereof for the purpose of any conversion thereof and for all other purposes. Shares of Class A Preferred Stock may be issued solely in book-entry form or, if requested by any Holder, such Holder’s shares may be issued in certificated form. The Corporation shall register the transfer of any shares of Class A Preferred Stock in the Class A Preferred Stock Register, upon surrender of the certificates (if applicable) evidencing such shares to be transferred, duly endorsed by the Holder thereof, to the Corporation at its address specified herein. Upon any such registration or transfer, a new certificate (or book-entry notation, if applicable) evidencing the shares of Class A Preferred Stock so transferred shall be issued to the transferee and a new certificate (or book-entry notation, if applicable) evidencing the

remaining portion of the shares not so transferred, if any, shall be issued to the transferring Holder, in each case, within three Business Days. The provisions of this Certificate of Designation are intended to be for the benefit of all Holders from time to time and shall be enforceable by any such Holder.

Section 3. Dividends. Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Class A Preferred Stock equal (on an as-if-converted-to-Common-Stock basis) to and in the same form as dividends (other than dividends in the form of Common Stock, which shall be made in accordance with Section 7(a)) actually paid on shares of the Common Stock when, as and if such dividends (other than dividends in the form of Common Stock, which shall be made in accordance with Section 7(a)) are paid on shares of the Common Stock. Other than as set forth in the previous sentence, no other dividends shall be paid on shares of Class A Preferred Stock; and the Corporation shall pay no dividends (other than dividends in the form of Common Stock) on shares of the Common Stock unless it simultaneously complies with the previous sentence. All declared but unpaid dividends on shares of Class A Preferred Stock shall increase the Stated Value of such shares, but when such dividends are actually paid any such increase in the Stated Value shall be rescinded.

Section 4. Voting Rights. Except as otherwise provided herein or as otherwise required by the DGCL, the Class A Preferred Stock shall have no voting rights. However, as long as any shares of Class A Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Class A Preferred Stock, (i) alter or change adversely the powers, preferences or rights given to the Class A Preferred Stock or alter or amend this Certificate of Designation, amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or bylaws of the Corporation, or file any articles of amendment, certificate of designations, preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the preferences, rights, privileges or powers of, or restrictions provided for the benefit of the Class A Preferred Stock in a manner materially different than the effect on the Common Stock, regardless of whether any of the foregoing actions shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise, (ii) issue further shares of Class A Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Class A Preferred Stock, or (iii) enter into any agreement with respect to any of the foregoing.

Section 5. Liquidation. Upon any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary (a "**Liquidation**"), the assets of the Corporation available for distribution to its stockholders shall be distributed *pari passu* among the holders of the shares of Common Stock and Class A Preferred Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to Common Stock pursuant to the terms of the Certificate of Incorporation (without regard to the Beneficial Ownership Limitation) immediately prior to such Liquidation. The Corporation shall mail written notice of any such Liquidation not less than 45 days prior to the payment date stated therein, to each Holder of shares of Class A Preferred Stock.

Section 6. Conversion.

(a) **Conversions at Option of Holder.** Each share of Class A Preferred Stock shall be convertible, at any time and from time to time from and after the Issuance Date, at the option of the Holder thereof, into a number of shares of Common Stock equal to the product of the Conversion Ratio and the number of shares of Class A Preferred Stock to be converted. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as **Annex A** (a "**Notice of Conversion**"), duly completed and executed. Other than a conversion following a Fundamental Transaction or following a

notice provided for under Section 7(d)(ii) hereof, the Notice of Conversion must specify at least a number of shares of Class A Preferred Stock to be converted equal to the lesser of (x) 100 shares (such number subject to appropriate adjustment following the occurrence of an event specified in Section 7(a) hereof) and (y) the number of shares of Class A Preferred Stock then held by the Holder. Provided the Corporation's transfer agent is participating in the Depository Trust Company ("**DTC**") Fast Automated Securities Transfer program, the Notice of Conversion may specify, at the Holder's election, whether the applicable Conversion Shares shall be credited to the DTC participant account nominated by the Holder through DTC's Deposit Withdrawal Agent Commission system (a "**DWAC Delivery**"). The "**Conversion Date**", or the date on which a conversion shall be deemed effective, shall be defined as the Trading Day that the Notice of Conversion, completed and executed, is sent by facsimile or other electronic transmission to, and received during regular business hours by, the Corporation; provided that the original certificate(s) (if any) representing such shares of Class A Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation within two (2) Trading Days thereafter. In all other cases, the Conversion Date shall be defined as the Trading Day on which the original shares of Class A Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation. The calculations set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error.

(b) Conversion Ratio. The "**Conversion Ratio**" for each share of Class A Preferred Stock shall be equal to the Stated Value divided by the Conversion Price.

(c) Beneficial Ownership Limitation. Notwithstanding anything herein to the contrary, the Corporation shall not effect any conversion of the Class A Preferred Stock, and a Holder shall not have the right to convert any portion of the Class A Preferred Stock, to the extent that, after giving effect to an attempted conversion set forth on an applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any other Person whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable regulations of the Commission, including any "group" of which the Holder is a member (the foregoing, "**Attribution Parties**")) would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Class A Preferred Stock subject to the Notice of Conversion with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted shares of Class A Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that are subject to a limitation on conversion or exercise similar to the limitation contained herein. For purposes of this Section 6(c), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable regulations of the Commission. In addition, for purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and the applicable regulations of the Commission. For purposes of this Section 6(c), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (A) the Corporation's most recent periodic or annual filing with the Commission, as the case may be, (B) a more recent public announcement by the Corporation that is filed with the Commission, or (C) a more recent notice by the Corporation or the Corporation's transfer agent to the Holder setting forth the number of shares of Common Stock then outstanding. Upon the written request of a Holder (which may be by email), the Corporation shall, within three (3) Trading Days thereof, confirm in writing to such Holder (which may

be via email) the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to any actual conversion or exercise of securities of the Corporation, including shares of Class A Preferred Stock, by such Holder or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was last publicly reported or confirmed to the Holder. The “**Beneficial Ownership Limitation**” shall initially be 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock pursuant to such Notice of Conversion (to the extent permitted pursuant to this Section 6(c)). The Corporation shall be entitled to rely on representations made to it by the Holder in any Notice of Conversion regarding its Beneficial Ownership Limitation. Notwithstanding the foregoing, by written notice to the Corporation, which will not be effective until the sixty-first (61st) day after such notice is delivered to the Corporation, the Holder may reset the Beneficial Ownership Limitation percentage to a higher or lower percentage, not to exceed 19.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock pursuant to such Notice of Conversion. Upon such a change by a Holder of the Beneficial Ownership Limitation, the Beneficial Ownership Limitation may not be further amended by such Holder without first providing the minimum 61-day notice required by this Section 6(c). Notwithstanding the foregoing, at any time following notice of a Fundamental Transaction, the Holder may waive and/or change the Beneficial Ownership Limitation effective immediately upon written notice to the Corporation and may reinstitute a Beneficial Ownership Limitation at any time thereafter effective immediately upon written notice to the Corporation.

(d) Nasdaq Conversion Limits; Solicitation of Stockholder Approval. Notwithstanding Section 6(a) and 6(c) of this Certificate of Designation, the Corporation shall not be required to issue any shares of Common Stock to a given Holder upon conversion by such Holder (or its assigns) of any shares of Class A Preferred Stock to the extent (and only to the extent) that such conversion would result in a given Holder (including its predecessors-in-interest) beneficially owning a number of shares of Common Stock in excess of the applicable Threshold Amount that has not been approved by the Corporation’s stockholders in accordance with the stockholder approval requirements of Nasdaq Marketplace Rule 5635 (a “**Blocked Conversion**”). The Corporation shall solicit the approval required under Nasdaq Marketplace Rule 5635 of its stockholders for the issuance of the full amount of shares of Common Stock otherwise issuable upon the conversion of all shares of Class A Preferred Stock authorized and designated under this Certificate of Designations in the absence of the Beneficial Ownership Limitation and without regard to the Blocked Conversion (the “**Requisite Approval**”) at its first annual meeting of stockholders after the Issuance Date and at each annual meeting of the Corporation’s stockholders thereafter to the extent the Requisite Approval has not then been obtained.

(e) Mechanics of Conversion

(i) Delivery of Certificate or Electronic Issuance Upon Conversion. Not later than three Trading Days after the applicable Conversion Date, or if the Holder requests the issuance of physical certificate(s), two (2) Trading Days after receipt by the Corporation of the original certificate(s) representing such shares of Class A Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion (the “**Share Delivery Date**”), the Corporation shall (a) deliver, or cause to be delivered, to the converting Holder a physical certificate or certificates representing the number of Conversion Shares being acquired upon the conversion of shares of Class A Preferred Stock, or (b) in the case of a DWAC Delivery (if so requested by the Holder), electronically transfer such Conversion Shares by crediting the DTC participant account nominated by the Holder through DTC’s DWAC system. If in the case of any Notice of Conversion such certificate or certificates are not delivered to or as directed by or, in the case of a DWAC Delivery, such shares are not electronically

delivered to or as directed by, the applicable Holder by the Share Delivery Date, the applicable Holder shall be entitled to elect to rescind such Conversion Notice by written notice to the Corporation at any time on or before its receipt of such certificate or certificates for Conversion Shares or electronic receipt of such shares, as applicable, in which event the Corporation shall promptly return to such Holder any original Class A Preferred Stock certificate delivered to the Corporation and such Holder shall promptly return to the Corporation any Common Stock certificates or otherwise direct the return of any shares of Common Stock delivered to the Holder through the DWAC system, representing the shares of Class A Preferred Stock unsuccessfully tendered for conversion to the Corporation.

(ii) Obligation Absolute. Subject to Sections 6(c) and 6(d) hereof and subject to Holder's right to rescind a Conversion Notice pursuant to Section 6(e)(i) above, the Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Class A Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares. Subject to Sections 6(c) and 6(d) hereof and subject to Holder's right to rescind a Conversion Notice pursuant to Section 6(e)(i) above, in the event a Holder shall elect to convert any or all of its Class A Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Class A Preferred Stock of such Holder shall have been sought and obtained by the Corporation, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the value of the Conversion Shares into which would be converted the Class A Preferred Stock which is subject to such injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall, subject to Sections 6(c) and 6(d) hereof and subject to Holder's right to rescind a Conversion Notice pursuant to Section 6(e)(i) above, issue Conversion Shares upon a properly noticed conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief; provided that Holder shall not receive duplicate damages for the Corporation's failure to deliver Conversion Shares within the period specified herein. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

(iii) Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. If the Corporation fails to deliver to a Holder the applicable certificate or certificates or to effect a DWAC Delivery, as applicable, by the Share Delivery Date pursuant to Section 6(e)(i) (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation), and if after such Share Delivery Date such Holder is required to or otherwise purchases (in an open market transaction or otherwise), shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "**Buy-In**"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other

remedies available to or elected by such Holder) the amount by which (x) such Holder's total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Class A Preferred Stock equal to the number of shares of Class A Preferred Stock submitted for conversion or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(e)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Class A Preferred Stock with respect to which the actual sale price (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice, within three (3) Trading Days after the occurrence of a Buy-In, indicating the amounts payable to such Holder in respect of such Buy-In together with applicable confirmations and other evidence reasonably requested by the Corporation. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver certificates representing shares of Common Stock upon conversion of the shares of Class A Preferred Stock as required pursuant to the terms hereof; provided, however, that the Holder shall not be entitled to both (i) require the reissuance of the shares of Class A Preferred Stock submitted for conversion for which such conversion was not timely honored and (ii) receive the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(e)(i).

(iv) Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Class A Preferred Stock, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holders of the Class A Preferred Stock, not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments of Section 7) upon the conversion of all outstanding shares of Class A Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid, non-assessable and free and clear of all liens and other encumbrances.

(v) Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon the conversion of the Class A Preferred Stock. As to any fraction of a share which a Holder would otherwise be entitled to receive upon such conversion, the Corporation shall pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price.

(vi) Transfer Taxes. The issuance of certificates (or book entry notations) for shares of the Common Stock upon conversion of the Class A Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificates (or such book entry notation), provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such certificate (or such book entry notation) upon conversion in a name other than that of the registered Holder(s) of such shares of Class A Preferred Stock and the Corporation shall not be

required to issue or deliver such certificates (or such book entry notation) unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid.

(f) Status as Stockholder. Upon each Conversion Date: (i) the shares of Class A Preferred Stock being converted shall be deemed converted into shares of Common Stock; and (ii) the Holder's rights as a holder of such converted shares of Class A Preferred Stock shall cease and terminate, excepting only the right to receive certificates (or book entry notations) for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Corporation to comply with the terms of this Certificate of Designation. In all cases, the holder shall retain all of its rights and remedies for the Corporation's failure to convert Class A Preferred Stock.

Section 7. Certain Adjustments.

(a) Stock Dividends and Stock Splits. If the Corporation, at any time while any shares of Class A Preferred Stock are outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock with respect to the then outstanding shares of Common Stock; (ii) subdivides outstanding shares of Common Stock into a larger number of shares; or (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event (excluding any treasury shares of the Corporation). Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision or combination.

(b) Fundamental Transaction. If, at any time while any shares of Class A Preferred Stock are outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any direct or indirect purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 35% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination and excluding shares acquired upon conversion of any currently outstanding convertible securities in accordance with the terms thereof as in effect on the date hereof) (each, a "**Fundamental Transaction**"), then (X) if the Requisite Approval has previously been obtained, each share of Class A Preferred Stock outstanding immediately prior to such Fundamental Transaction shall, without any further

action of the Holders thereof, automatically convert into shares of Common Stock at the applicable Conversion Ratio, upon the effective date and time (“**Fundamental Transaction Effective Time**”) of such Fundamental Transaction, and (Y) if the Requisite Approval has not previously been obtained, then as of the Fundamental Transaction Effective Time, each outstanding share of Class A Preferred Stock shall be canceled without any further action on the part of the Corporation or the Holder thereof, and in consideration for such cancellation, each Holder shall automatically receive , for each Conversion Share that would have been issuable had such cancelled shares of Class A Preferred Stock been converted immediately prior to the occurrence of such Fundamental Transaction, the same kind and amount of securities, cash and other property receivable upon the effectiveness of such Fundamental Transaction (the “**Exchange Property**”) as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of one share of Common Stock (the “**Alternate Consideration**”). The amount of Exchange Property receivable upon any Fundamental Transaction shall be determined based upon the Conversion Ratio in effect on such Fundamental Transaction Effective Time.

If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holders shall be given the same choice as to the Alternate Consideration it receives upon any conversion of their shares of Class A Preferred Stock following such Fundamental Transaction should such shares of Class A Preferred Stock remain outstanding after such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions should any shares of Class A Preferred Stock remain outstanding after a Fundamental Transaction, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders’ right to convert such preferred stock into Alternate Consideration. The terms of any agreement to which the Corporation is a party and pursuant to which a Fundamental Transaction is effected shall include terms requiring any such successor or surviving entity to comply with the provisions of this Section 7(b) and ensuring that the outstanding shares of Class A Preferred Stock (or any such replacement security) will be similarly adjusted upon any subsequent transaction analogous to a Fundamental Transaction.

The Corporation (or any successor) shall, within 20 days of the Effective Time of any Fundamental Transaction, provide written notice to the Holders of the occurrence of such event and of the kind and amount of the cash, securities or other property that constitute the Exchange Property. Failure to deliver such notice shall not affect the operation of this Section 7.

The Corporation shall not enter into any agreement for a transaction constituting a Fundamental Transaction that would interfere with or prevent (as applicable) conversion of the Class A Preferred Stock into the Exchange Property in a manner that is consistent with and gives effect to this Section 7.

(c) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the number of shares of Common Stock issued and outstanding (excluding any treasury shares of the Corporation).

(d) Notice to the Holders.

(i) Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder a notice setting

forth the Conversion Ratio after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(ii) Other Notices. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of the shares of Class A Preferred Stock, and shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice.

Section 8. Miscellaneous.

(a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, via email, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at 3535 General Atomics Court, Suite 200, San Diego, California 92121, Attention: Cindy R. Tahl, General Counsel, email: cindy.tahl@fatetherapeutics.com, with a copy (which shall not constitute notice) to: Goodwin Procter LLP, Three Embarcadero Center, 24th Floor, San Francisco, California 94111, Attention: Maggie Wong and Mitzi Chang, email: mwong@goodwinlaw.com, mchang@goodwinlaw.com, fax: (858) 726-7517; or such other facsimile number, email address, or mailing address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, email, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, email address or mailing address of such Holder appearing on the books of the Corporation, or if no such facsimile number, email address, or mailing address appears on the books of the Corporation, at the principal place of business of such Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of: (i) the date of transmission, if such notice or communication is delivered via facsimile or email prior to 5:30 p.m. (New York City time) on any date, (ii) the date immediately following the date of transmission, if such notice or communication is delivered via facsimile or email between 5:30 p.m. and 11:59 p.m. (New York City time) on any date, (iii) the second

Business Day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

(b) Lost or Mutilated Class A Preferred Stock Certificate. If a Holder's Class A Preferred Stock certificate, if applicable, shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, if requested by the Holder, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Class A Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership thereof, reasonably satisfactory to the Corporation and, in each case, customary and reasonable indemnity, if requested. Applicants for a new certificate under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Corporation may prescribe.

(c) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation. Any waiver by the Corporation or a Holder must be in writing. Notwithstanding any provision in this Certificate of Designation to the contrary, any provision contained herein and any right of the Holders of Class A Preferred Stock granted hereunder may be waived as to all shares of Class A Preferred Stock (and the Holders thereof) upon the written consent of the Holders of a majority of the shares of Class A Preferred Stock then outstanding, unless a higher percentage is required by the DGCL, in which case the written consent of the Holders of not less than such higher percentage shall be required.

(d) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

(e) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

(f) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

(g) Status of Converted Class A Preferred Stock. If any shares of Class A Preferred Stock shall be converted by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Class A Preferred Stock.

(h) Redemption by the Corporation. The Class A Preferred Stock shall not be redeemable by the Corporation.

(i) Transfer Agent, Registrar and Conversion Agent. The duly appointed transfer agent, registrar, conversion and dividend paying agent for shares of Class A Preferred Stock shall be American Stock

Transfer & Trust Company, LLC (the "**Transfer Agent**"). The Corporation may, in its sole discretion, remove the Transfer Agent in accordance with the agreement between the Corporation and the Transfer Agent; *provided that* the Corporation shall appoint a successor transfer agent who shall accept such appointment prior to the effectiveness of such removal. Upon any such removal or appointment, the Corporation shall send notice thereof by first-class mail, postage prepaid, to the Holders of shares of Class A Preferred Stock.

(j) **Form.** To the extent issued in certificated form, the Class A Preferred Stock shall be issued in the form of one or more definitive shares in fully registered form in substantially the form attached hereto as Exhibit A (each, a "**Class A Preferred Stock Certificate**"), which is hereby incorporated in and expressly made a part of this Certificate of Designation. Each Class A Preferred Stock Certificate shall reflect the number of shares of Class A Preferred Stock represented thereby, and may have notations, legends or endorsements required by law, stock exchange rules, agreements to which the Corporation is subject, if any, or usage (provided that any such notation, legend or endorsement is in a form acceptable to the Corporation). Each Class A Preferred Stock Certificate shall be registered in the name or names of the Person or Persons specified by the depository in a written instrument to the registrar.

The President and either the Treasurer or the Secretary of the Corporation shall sign each Class A Preferred Stock Certificate for the Corporation, in accordance with the Corporation's bylaws and applicable law, by manual or facsimile signature. If an officer whose signature is on a Class A Preferred Stock Certificate no longer holds that office at the time the Transfer Agent countersigned the Class A Preferred Stock Certificate, the Class A Preferred Stock Certificate shall be valid nevertheless. A Class A Preferred Stock Certificate shall not be valid until an authorized signatory of the Transfer Agent manually countersigns Class A Preferred Stock Certificate. Each Class A Preferred Stock Certificate shall be dated the date of its countersignature.

IN WITNESS WHEREOF, Fate Therapeutics, Inc. has caused this Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock to be executed by its duly authorized officer this __ day of November, 2016.

J. Scott Wolchko
President and Chief Executive Officer

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER
IN ORDER TO CONVERT SHARES OF CLASS A PREFERRED STOCK)

The undersigned Holder hereby irrevocably elects to convert the number of shares of Class A Preferred Stock indicated below, represented by stock certificate No(s) _____ or book entry notation (the "**Preferred Stock Certificates**"), into shares of common stock, par value \$0.001 per share (the "**Common Stock**"), of Fate Therapeutics, Inc., a Delaware corporation (the "**Corporation**"), as of the date written below. If securities are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. Capitalized terms utilized but not defined herein shall have the meaning ascribed to such terms in that certain Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock (the "**Certificate of Designation**") filed by the Corporation with the Delaware Secretary of State on November [___], 2016.

As of the date hereof, the number of shares of Common Stock beneficially owned by the undersigned Holder (together with such Holder's Affiliates, and any other Person whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable regulations of the Commission, including any "group" of which the Holder is a member (the foregoing, "**Attribution Parties**")), including the number of shares of Common Stock issuable upon conversion of the Class A Preferred Stock subject to this Notice of Conversion, but excluding the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted Class A Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that are subject to a limitation on conversion or exercise similar to the limitation contained in Section 6(c) of the Certificate of Designation, is [___]%. For purposes hereof, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable regulations of the Commission. In addition, for purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and the applicable regulations of the Commission.

Conversion calculations:

Date to Effect Conversion:

Number of shares of Class A Preferred Stock owned prior to Conversion:

Number of shares of Class A Preferred Stock to be Converted:

Number of shares of Common Stock to be Issued:

Address for delivery of physical certificates:

Or

for DWAC Delivery:

DWAC Instructions:

Broker no:

Account no:

HOLDER

By: _____

Name: _____

Title: _____

Date: _____

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this “**Agreement**”) is made and entered into as of November 21, 2016, by and among Fate Therapeutics, Inc., a Delaware corporation (the “**Company**”), and the several purchasers signatory hereto (each a “**Purchaser**” and collectively, the “**Purchasers**”).

This Agreement is made pursuant to the Securities Purchase Agreement, dated as of the date hereof between the Company, each Purchaser and certain other purchasers (the “**Purchase Agreement**”).

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and each of the Purchasers agree as follows:

1. **Definitions.** Capitalized terms used and not otherwise defined herein that are defined in the Purchase Agreement shall have the meanings given such terms in the Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

“**Affiliate**” means, with respect to any person, any other person which directly or indirectly controls, is controlled by, or is under common control with, such person.

“**Business Day**” means a day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

“**Commission**” means the Securities and Exchange Commission.

“**Common Stock**” means the common stock of the Company, par value \$0.001 per share, and any securities into which such common stock may hereinafter be reclassified.

“**Cut-Back Shares**” shall mean any Registrable Securities that, by virtue of the Commission informing the Company that all of the Registrable Securities cannot, as a result of the application of Rule 415, be registered for resale as a secondary offering on a single registration statement as provided in Section 2(a) below, cannot be registered on the Registration Statement or the New Registration Statement.

“**Effective Date**” means the date that the Registration Statement filed pursuant to Section 2(a) is first declared effective by the Commission.

“**Effectiveness Deadline**” means (A) the ninetieth (90th) calendar day following the Closing Date (or, in the event the Commission reviews and has written comments to the Registration Statement, the one hundred thirty-fifth (135th) calendar day following the Closing Date); and (B) solely with respect to the New Registration Statement, the sixtieth (60th) calendar day following the New Registration Statement Filing Deadline (or, in the event the Commission reviews and has written comments to the Registration Statement, the ninetieth (90th) calendar day following the New Registration Statement Filing Deadline); *provided, however*, that in either case of (A) or (B), if the Company is

notified by the Commission that the Registration Statement will not be reviewed or is no longer subject to further review and comments, the Effectiveness Deadline as to such Registration Statement shall be the third (3rd) Trading Day following the date on which the Company is so notified if such date precedes the dates otherwise required above; *provided, further*, that if the Effectiveness Deadline falls on a Saturday, Sunday or other day that the Commission is closed for business, the Effectiveness Deadline shall be extended to the next Business Day on which the Commission is open for business.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Filing Deadline**” means the sixtieth (60th) calendar day following the Closing Date, *provided, however*, that if the Filing Deadline falls on a Saturday, Sunday or other day that the Commission is closed for business, the Filing Deadline shall be extended to the next business day on which the Commission is open for business.

“**Holder**” or “**Holders**” means the holder or holders, as the case may be, from time to time of Registrable Securities.

“**New Registration Statement Filing Deadline**” means the thirtieth (30th) calendar day following the date on which the Company first becomes eligible to file the New Registration Statement.

“**Person**” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“**Preferred Stock**” means Class A Preferred Stock, par value \$0.001 per share issued pursuant to the Purchase Agreement, and any securities into which such Class A Preferred Stock may hereinafter be reclassified.

“**Proceeding**” means an action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“**Prospectus**” means the prospectus included in the Registration Statement (including, without limitation, a prospectus that includes any information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A promulgated under the Securities Act), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by the Registration Statement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

“**Registrable Securities**” means all of (i) the Shares and (ii) any securities issued or issuable or distributable in respect of, or in substitution for, any securities in (i) above upon any conversion, exercise, stock split, dividend or other distribution, merger, consolidation, exchange,

recapitalization or similar event (collectively, the “**Company Shares**”), *provided*, that with respect to a particular Holder, such Holder’s Company Shares shall cease to be Registrable Securities upon the earliest to occur of the following: (A) a Registration Statement with respect to the sale of such Registrable Securities has been declared effective under the Securities Act and such Registrable Securities have been disposed of in accordance with the plan of distribution set forth in such Registration Statement (in which case, only such security sold by the Holder shall cease to be a Registrable Security); (B) if all of the Company Shares then owned by such Holder and its Affiliates could be sold in any ninety (90)-day period pursuant to Rule 144 without restriction as to volume or manner of sale and the restrictive legends and stop orders have been removed from such Holder’s Company Shares; or (C) such Company Shares are otherwise transferred, assigned, sold, conveyed or otherwise disposed of.

“**Registration Statement**” shall have the meaning set forth in Section 2(a) and shall, as the context shall permit, include the New Registration Statement (as defined in Section 2(a)).

“**Rule 144**” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“**Rule 415**” means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“**Rule 424**” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“**SEC Filings**” shall mean all reports, schedules, forms, statements and other documents filed or required to be filed by the Company with the Commission pursuant to the requirements of the Securities Act or the Exchange Act, including material filed pursuant to Section 13(a) or 15(c) of the Exchange Act, in each case, together with all exhibits, supplements, amendments and schedules thereto, and all documents incorporated by reference therein.

“**SEC Guidance**” means (i) any publicly-available written or oral guidance, comments, requirements or requests of the Commission staff and (ii) the Securities Act.

“**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“**Shares**” means the shares of Common Stock issued to the Purchasers pursuant to the Purchase Agreement and the Underlying Shares.

“**Underlying Shares**” means the shares of Common Stock issued or issuable upon conversion of the Preferred Stock.

2. Registration.

(a) On or prior to the Filing Deadline, the Company shall prepare and file with the Commission a registration statement covering the resale of the Registrable Securities for an offering to be made on a continuous basis pursuant to Rule 415 or, if Rule 415 is not available for offers and sales of the Registrable Securities, by such other means of distribution of Registrable Securities as the Holders may reasonably specify, in respect of which the Company may use a Form S-3 registration statement (or any successor short form registration statement available for such resale that permits incorporation by reference at least to the same extent as such form) ("**Form S-3**") or, if Form S-3 is not then available to the Company, on such form of registration statement as is then available to effect a registration for resale of the Registrable Securities (together with the Form S-3, the "**Registration Statement**"). The Registration Statement shall contain (except if otherwise required pursuant to written comments received from the Commission upon a review of such Registration Statement) a "Plan of Distribution" section that will include all such transactions as the Holders may reasonably request in writing prior to the filing of the Registration Statement and that can be included in the Registration Statement under the rules and regulations of the Commission; *provided, however*, that no Holder shall be named as an "underwriter" in the Registration Statement without such Holder's prior written consent. Notwithstanding the registration obligations set forth in this Section 2, in the event the Commission informs the Company that all of the Registrable Securities cannot, as a result of the application of Rule 415, be registered for resale as a secondary offering on a single registration statement, the Company agrees to promptly (i) inform each of the Holders thereof and use its commercially reasonable efforts to file amendments to the Registration Statement as required by the Commission and/or (ii) withdraw the Registration Statement and file a new registration statement (a "**New Registration Statement**"), in either case covering the maximum number of Registrable Securities permitted to be registered by the Commission, on Form S-3 or such other form available to register for resale the Registrable Securities as a secondary offering; *provided, however*, that prior to filing such amendment or New Registration Statement, the Company shall be obligated to use its commercially reasonable efforts to advocate with the Commission for the registration of all of the Registrable Securities in accordance with the SEC Guidance, including without limitation, the Manual of Publicly Available Telephone Interpretations D.29, and permitting the Holders to review and provide reasonable input on such responses to the Commission. In the event the Company amends the Registration Statement or files a New Registration Statement, as the case may be, under clauses (i) or (ii) above, the Company will use its commercially reasonable efforts to file with the Commission, as promptly as allowed by Commission or SEC Guidance provided to the Company or to registrants of securities in general, one or more registration statements on Form S-3 or such other form available to register for resale the Cut-Back Shares. The Registrable Securities, including Cut-Back Shares (if any), included on any such Registration Statement filed pursuant to this Section 2(a) shall be allocated pro rata among the Holders on the basis of their relative holdings of Registrable Securities.

(b) The Company shall use its commercially reasonable best efforts to cause the Registration Statement to be declared effective by the Commission as soon as practicable and no later than the Effectiveness Deadline (including filing with the Commission a request for acceleration of effectiveness in accordance with Rule 461 promulgated under the Securities Act), and shall use its commercially reasonable efforts to keep the Registration Statement continuously effective under the

Securities Act until the earlier of (i) such time as all of the Registrable Securities covered by such Registration Statement have been sold by the Holders or (ii) the date that all Registrable Securities then owned by such Holder and its Affiliates could be sold in any ninety (90)-day period pursuant to Rule 144 without restriction as to volume or manner of sale and the restrictive legends and stop orders have been removed from such Holder's Registrable Securities (the "**Effectiveness Period**"). The Company shall promptly notify the Holders of the effectiveness of the Registration Statement and shall promptly, and in no event later than the second Trading Day after the Company receives notice of the effectiveness of the Registration Statement, file a final Prospectus with the Commission, as required by Rule 424(b).

(c) Each Holder agrees to promptly complete, execute, acknowledge and deliver such customary selling stockholder questionnaires and other documents, certificates, instruments, representations and warranties and indemnities as may be reasonably requested by the Company in connection with the filing of the Registration Statement and the inclusion of such Holder as a selling stockholder in the Registration Statement. Each Holder further agrees that it shall not be entitled to be named as a selling security holder in the Registration Statement or use the Prospectus for offers and resales of Registrable Securities at any time, unless such Holder has furnished to the Company such documents and information as described in the previous sentence. Each Holder acknowledges and agrees that the information furnished in writing by the Holder as described in this Section 2(c) will be used by the Company in the preparation of the Registration Statement and hereby consents to the inclusion of such information in the Registration Statement.

(d) In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on another appropriate form reasonably acceptable to the Holders and (ii) undertake to register the Registrable Securities on Form S-3 promptly after such form is available, *provided*, that the Company shall maintain the effectiveness of the registration statement then in effect until such time as a registration statement on Form S-3 covering the Registrable Securities has been declared effective by the Commission.

(e) If: (i) the Registration Statement or the New Registration Statement is not filed with the Commission on or prior to the Filing Deadline or the New Registration Statement Filing Deadline (as applicable), (ii) the Registration Statement or the New Registration Statement, as applicable, is not declared effective by the Commission (or otherwise does not become effective) for any reason on or prior to the applicable Effectiveness Deadline, or (iii) after its Effective Date and except with respect to a permitted Shelf Suspension, (A) such Registration Statement ceases for any reason (including, without limitation, by reason of a stop order or the Company's failure to update the Registration Statement or New Registration Statement), to remain continuously effective as to all Registrable Securities required to be included therein, or (B) the Holders are not permitted to utilize the Prospectus therein to resell such Registrable Securities for any reason (other than due to the inaccuracy of any information regarding the Holders) for more than an aggregate of thirty (30) consecutive calendar days or fifty (50) calendar days (which need not be consecutive days) during any twelve (12) month period (any such failure or breach in clauses (i) through (iii) above being referred to as an "**Event**," and the date on which such Event occurs being referred to as an "**Event Date**"), then in addition to any other rights the Holders may have hereunder

or under applicable law: (x) within five Business Days after an Event Date, the Company shall pay to each Holder an amount in cash, as liquidated damages and not as a penalty, for any unregistered Registrable Securities held by such Holder on such Event Date, equal to 1.0% of the aggregate original purchase price paid by such Holder for such Registrable Securities; and (y) on each 30-day anniversary (or pro rata portion thereof) following any Event Date until the earlier of (1) the date on which the applicable Event is cured or (2) the date on which the Registrable Securities become eligible for resale by non-affiliates pursuant to Rule 144 without manner of sale or volume restrictions, the Company shall pay to each Holder an amount in cash, as liquidated damages and not as a penalty, for any unregistered Registrable Securities then held by such Holder, equal to 1.0% of the aggregate original purchase price paid by such Holder for such Registrable Securities. The amounts payable pursuant to the foregoing clauses (x) and (y) are referred to collectively as "Liquidated Damages." The parties agree that notwithstanding anything to the contrary herein or in the Purchase Agreement, no Liquidated Damages shall be payable with respect to any period after the expiration of the Effectiveness Period and in no event shall the aggregate amount of Liquidated Damages payable to a Holder exceed, in the aggregate, 3% of the aggregate purchase price paid by such Holder pursuant to the Purchase Agreement. Unless otherwise specified in Section 2(e), the Liquidated Damages pursuant to the terms hereof shall apply on a daily pro-rata basis for any portion of a month prior to the cure of an Event, except in the case of the first Event Date. Notwithstanding the foregoing, nothing shall preclude any Holder from pursuing or obtaining any available remedies at law, specific performance or other equitable relief with respect to this Section 2(e) in accordance with applicable law. The Company shall not be liable for Liquidated Damages under this Agreement as to any Cut-Back Shares that are not permitted by the Commission to be included in a Registration Statement due solely to SEC Guidance from the time that it is determined that such Registrable Securities are not permitted to be registered until such time as the provisions of this Agreement as to the New Registration Statements required to be filed hereunder are triggered, in which case the provisions of this Section 2(e) shall once again apply, if applicable. In such case, the Liquidated Damages shall be calculated to only apply to the percentage of Registrable Securities which are then permitted in accordance with SEC Guidance to be included in such New Registration Statement(s). The Effectiveness Deadline for a Registration Statement shall be extended without default or Liquidated Damages hereunder in the event that the Company's failure to obtain the effectiveness of the Registration Statement on a timely basis results from the failure of a Holder to timely provide the Company with information requested by the Company and necessary to complete the Registration Statement in accordance with the requirements of the Securities Act (in which the Effectiveness Deadline would be extended with respect to Registrable Securities held by such Holder).

3. Piggyback Registration.

(a) If at any time or from time to time the Company shall determine to register (including for this purpose a registration effected by the Company for security holders other than Purchasers) any of its shares or other securities, (other than (i) in a registration relating solely to employee benefit plans, (ii) a registration on Form S-4 or S-8 (or such other similar successor forms then in effect under the Securities Act), (iii) a registration pursuant to which the Company is offering to exchange its own securities, (iv) a registration statement relating solely to dividend reinvestment or similar plans, (v) a resale shelf registration statement relating solely to debt securities of the Company that are convertible into Common Stock and the underlying shares of Common Stock, (vi) a registration on any registration

form that does not permit secondary sales or (vii) a registration pursuant to Section 2 hereof), the Company will:

- A. promptly (but in no event less than ten (10) Business Days before the effective date of the relevant Registration Statement) give to Purchasers written notice thereof; and
- B. include in such registration (and any related qualification under state securities laws or other compliance), and in any underwriting involved therein, all the Registrable Securities specified in a written request or requests, made within five (5) Business Days after receipt of such written notice from the Company, by a Purchaser, except as set forth in Section 4 below.

(b)The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 3 prior to the effectiveness of such registration whether or not any Purchaser has elected to include Registrable Securities in such registration. The expenses of such withdrawn registration shall be borne by the Company in accordance with Section 6 hereof.

(c)Notwithstanding anything to the contrary herein, the Purchasers' piggyback registration rights pursuant to this Section 3 will be available for the entire term of this agreement provided however, that such piggyback registration rights pursuant to this Section 3 will not be available to the Purchasers (i) during the period commencing on the effectiveness of the Registration Statement and in all cases ending on the one year anniversary of the Closing Date and (ii) commencing on the fourth anniversary of the Closing Date.

4.Underwriting Requirements. If a registration pursuant to Section 3 is an underwritten offering, the right of Holders to registration pursuant to Section 3 shall be conditioned upon Holders' participation in such underwriting and the inclusion of Holders' Registrable Securities in the underwriting to the extent provided herein. Holders shall, together with the Company, enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company. Any such participating Holder shall not be required to make any representations or warranties to, or agreements with the Company or the underwriters in connection with such underwriting agreement other than representations, warranties or agreements regarding such participating Holder, compliance with laws, such participating Holder's title to the Registrable Securities, such participating Holder's authority to sell the Registrable Securities, such Holder's intended method of distribution, no conflicts with respect to the sale of Registrable Securities, absence of liens with respect to the Registrable Securities, receipt of all required consents and approvals with respect to the entry into such underwriting agreement and the sale of such Registrable Securities or any other representations required to be made by such participating Holder under applicable law, rule or regulation, and the aggregate amount of the liability of such participating Holder in connection with such underwriting agreement shall not exceed, except in the case of fraud or willful misconduct, such participating Holder's net proceeds (after deducting underwriting discounts and commissions) from such underwritten offering. Notwithstanding any other provision of this Section 4, if the underwriter determines that marketing factors require a limitation of the number of shares to be underwritten and advises the Company in writing, the Company shall so advise the participating Holders, and the number of shares of such securities, including Registrable Securities, that

may be included in the registration and underwriting shall be allocated first to the Company, second to Purchasers and third to any other holders with registration rights. Notwithstanding the foregoing, no such reduction shall (i) reduce the securities being offered by the Company for its own account to be included in the registration and underwriting, or (ii) reduce the amount of securities of Purchasers included in the registration below twenty percent (20%) of the total amount of securities included in such registration. No securities excluded from the underwriting by reason of the underwriter's marketing limitation shall be included in such registration. For the avoidance of doubt, nothing in this Section 4 is intended to diminish the number of securities to be included by the Company in the underwriting.

5. Registration Procedures

In connection with the Company's registration obligations hereunder, the Company shall:

(a) Provide copies to and permit counsel designated by the Holders to review each Registration Statement and any Prospectus, and all amendments and supplements thereto, no fewer than five (5) days prior to their filing with the SEC and not file any document in a form to which such Holder reasonably objects in good faith; *provided, however*, that the Company is notified of such objection in writing at least one (1) Trading Day prior to such filing.

(b)(i) Prepare and file with the Commission such pre- and post-effective amendments and supplements, to the Registration Statement and the Prospectus used in connection therewith as may be necessary to keep such Registration Statement continuously effective as to the applicable Registrable Securities for its Effectiveness Period; (ii) cause the related Prospectus to be amended or supplemented by any required Prospectus supplement (subject to the terms of this Agreement), and, as so supplemented or amended, to be filed pursuant to Rule 424; (iii) respond as promptly as reasonably practicable to any comments received from the Commission with respect to the Registration Statement or any amendment thereto and, as promptly as reasonably possible, provide the Holders true and complete copies of all correspondence from and to the Commission relating to such Registration Statement that pertains to the Holders as "Selling Stockholders" but not any comments that would result in the disclosure to the Holders of material and non-public information concerning the Company; and (iv) comply with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by the Registration Statement until such time as all of such Registrable Securities shall have been disposed of (subject to the terms of this Agreement) in accordance with the intended methods of disposition by the Holders thereof as set forth in such Registration Statement as so amended or in such Prospectus as so supplemented; *provided, however*, that each Holder shall be responsible for the delivery of the Prospectus to the Persons to whom such Holder sells any of the Registrable Securities (including in accordance with Rule 172 under the Securities Act), and each Holder agrees to dispose of Registrable Securities in compliance with the "Plan of Distribution" described in the Registration Statement and otherwise in compliance with applicable federal and state securities laws. In the case of amendments and supplements to the Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 5(b)) by reason of the Company filing a report on Form 10-K, Form 10-Q or Form 8-K or any analogous report under the Exchange Act, the Company shall have incorporated such report by reference into such Registration

Statement, if applicable, or shall file such amendments or supplements with the Commission on the same day on which the Exchange Act report which created the requirement for the Company to amend or supplement such Registration Statement was filed.

(c) Notify the Holders as promptly as reasonably practicable (and, in the case of (i)(A) below, not less than one (1) Trading Day prior to such filing): (i)(A) when a Prospectus or any Prospectus supplement or post-effective amendment to the Registration Statement is proposed to be filed; (B) of any comments from the Commission in writing on the Registration Statement that pertain to the Holders as a "Selling Stockholder" or to the "Plan of Distribution" and all written responses thereto (excluding any information that the Company believes would constitute material and non-public information) and (C) with respect to the Registration Statement or any post-effective amendment, when the same has become effective; (ii) of any request by the Commission or any other Federal or state governmental authority for amendments or supplements to the Registration Statement or Prospectus or for additional information that pertains to the Holders as "Selling Stockholders" or the "Plan of Distribution"; (iii) of the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any Proceedings for that purpose; (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any Proceeding for such purpose; (v) of the occurrence of any event or passage of time that makes the financial statements included in the Registration Statement ineligible for inclusion therein or any statement made in such Registration Statement or Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to such Registration Statement, Prospectus or other documents so that, in the case of such Registration Statement or the Prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus, form of prospectus or supplement thereto, in light of the circumstances under which they were made), not misleading and (vi) of the occurrence or existence of any pending corporate development with respect to the Company that the Company believes may be material and that, in the determination of the Company, makes it not in the best interest of the Company to allow continued availability of the Registration Statement or Prospectus, *provided*, that, any and all such information shall remain confidential to each Holder until such information otherwise becomes public, unless disclosure by a Holder is required by law; and *provided, further*, that notwithstanding each Holder's agreement to keep such information confidential, each such Holder makes no acknowledgement that any such information is material, non-public information.

(d) Use commercially reasonable efforts to avoid the issuance of, or, if issued, obtain the withdrawal of (i) any order suspending the effectiveness of the Registration Statement, or (ii) any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale in any jurisdiction, as soon as practicable.

(e) If requested by a Holder, furnish to such Holder, without charge, such number of conformed copies of the applicable Registration Statement and Prospectus and each amendment thereto

and all exhibits (including those previously furnished or incorporated by reference) promptly after the filing of such documents with the Commission and to the extent reasonably requested by such Holder.

(f) Prior to any resale of Registrable Securities by a Holder, use its commercially reasonable efforts to register or qualify or cooperate with the selling Holders in connection with the registration or qualification (or exemption from the registration or qualification) of such Registrable Securities for the resale by the Holder under the securities or Blue Sky laws of such jurisdictions within the United States as any Holder reasonably requests in writing, to keep each registration or qualification (or exemption therefrom) effective during the Effectiveness Period and to do any and all other acts or things reasonably necessary to enable the disposition in such jurisdictions of the Registrable Securities; *provided*, that the Company shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified, subject the Company to any material tax in any such jurisdiction where it is not then so subject or file a general consent to service of process in any such jurisdiction.

(g) If requested by a Holder, cooperate with such Holder to facilitate the timely preparation and delivery of certificates representing Registrable Securities that may be delivered to a transferee pursuant to the Registration Statement, which certificates shall be free, to the extent permitted by the Purchase Agreement and under law, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holders may reasonably request.

(h) Following the occurrence of any event contemplated by Section 5(c), as promptly as reasonably practicable (taking into account the Company's good faith assessment of any adverse consequences to the Company and its stockholders of the premature disclosure of such event), prepare a supplement or amendment, including a post-effective amendment, to the Registration Statement or a supplement to the related Prospectus or any document incorporated or deemed to be incorporated therein by reference, and file any other required document so that, as thereafter delivered, neither the Registration Statement nor any Prospectus will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus, form of prospectus or supplement thereto, in light of the circumstances under which they were made), not misleading. If the Company notifies the Holders in accordance with clauses (iii) through (vi) of Section 5(c) above to suspend the use of any Prospectus until the requisite changes to such Prospectus have been made, then the Holders shall suspend use of such Prospectus. The Company will use its commercially reasonable efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable.

(i) In the case of an underwritten offering, make such representations and warranties to and enter into customary agreements with the participating Holders and the underwriters or agents, if any, in form, substance and scope as are customarily made by issuers in secondary underwritten public offerings; and

(j) Use its commercially reasonable best efforts to comply with all applicable securities laws and make available to its security holders, as soon as reasonably practicable, an earnings

statement satisfying the provisions of Section 11(a) of the Securities Act and the rules and regulations promulgated thereunder, to the extent not publicly available on the Commission's Edgar System.

6. Registration Expenses. All fees and expenses incident to the Company's performance of or compliance with its obligations under this Agreement (excluding any underwriting discounts and selling commissions relating to Registrable Securities sold under a Registration Statement on behalf of a Holder, and all legal fees and expenses of legal counsel for any Holder) shall be borne by the Company whether or not any Registrable Securities are sold pursuant to the Registration Statement; *provided, however*, that in no event shall the Company be responsible for any underwriting, broker or similar fees or commissions of any Holder. Other than the legal fees of one outside counsel to the Holders in an amount not to exceed \$50,000 in the aggregate in connection with the Company's obligations with respect to Registrable Securities hereunder, the Company shall not be responsible for any legal fees or other costs of the Holders.

7. Indemnification.

(a) Indemnification by the Company. The Company shall, notwithstanding any termination of this Agreement, indemnify, defend and hold harmless each Holder, the officers, directors, agents, investment advisers, partners, members, managers, stockholders, Affiliates and employees of each of them, each Person who controls any such Holder (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, partners, members, managers, stockholders, agents and employees of each such controlling Person (collectively, the "**Stockholder Parties**"), to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable costs of preparation and investigation and reasonable attorneys' fees) and expenses (collectively, "**Losses**"), as incurred, that arise out of or are based upon (i) any untrue or alleged untrue statement of a material fact contained in any Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus under which Registrable Securities were registered under the Securities Act, or arising out of or relating to any omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or form of prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that (A) such untrue statements, alleged untrue statements, omissions or alleged omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and approved in writing by such Holder expressly for use in the Registration Statement, such Prospectus or such form of Prospectus or in any amendment or supplement thereto or (B) in the case of an occurrence of an event of the type specified in Section 5(c)(iii), (iv) and (vi), related to the use by a Holder of an outdated or defective Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated or defective, or (C) to the extent that any such Losses arise out of the Holder's (or any other indemnified Person's) failure to send or give a copy of the Prospectus or supplement (as then amended or supplemented), if required, pursuant to Rule 172 under the Securities Act (or any successor rule) to the Persons asserting an untrue statement or alleged untrue statement or alleged

untrue statement or omission or alleged omission at or prior to the written confirmation of the sale of Registrable Securities to such Person if such statement or omission was corrected in such Prospectus or supplement, (ii) any violation or alleged violation by the Company of any federal, state or common law rule or regulation applicable to the Company or any of its subsidiaries in connection with any such registration, qualification, compliance or sale of the Registrable Securities or in connection with the performance of its obligations under this Agreement, (iii) any failure to register or qualify Registrable Securities in any state where the Company or its agents have affirmatively undertaken or agreed in writing that the Company (the undertaking of any underwriter being attributed to the Company) will undertake such registration or qualification on behalf of the Holders of such Registrable Securities (provided that in such instance the Company shall not be so liable if it has undertaken its reasonable best efforts to so register or qualify such Registrable Securities and provided, further, that the Company shall in no event be required to qualify to do business or to file a general consent to service of process in any state or jurisdiction unless the Company is already subject to service in such state or jurisdiction and except as may be required under the Securities Act) or (iv) any actions or inactions or proceedings in respect of the foregoing. The Company shall notify the Holders promptly of the institution, threat or assertion of any Proceeding arising from or in connection with the transactions contemplated by this Agreement of which the Company is aware. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of an Indemnified Party (as defined in Section 7(c)) and shall survive the transfer of the Registrable Securities by the Holders.

(b)Indemnification by Holders. Each Holder shall, severally and not jointly, indemnify and hold harmless the Company, its directors, officers, agents and employees, each Person who controls the Company (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, agents or employees of such controlling Persons, to the fullest extent permitted by applicable law, from and against all Losses, as incurred, arising out of or are based solely upon any untrue or alleged untrue statement of a material fact contained in the Registration Statement, any Prospectus, or any form of prospectus, or in any amendment or supplement thereto or in any preliminary prospectus under which Registrable Securities were registered under the Securities Act, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus, or any form of prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading (i) to the extent that such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or (ii) to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and approved in writing by such Holder expressly for use in the Registration Statement, such Prospectus or such form of Prospectus or in any amendment or supplement thereto, or (iii) in the case of an occurrence of an event of the type specified in Section 5(c)(iii), (iv) and (vi), to the extent related to the use by such Holder of an outdated or defective Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated or defective. In no event shall the liability of any selling Holder hereunder be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

(c)Conduct of Indemnification Proceedings. If any Proceeding shall be brought or asserted against any Person entitled to indemnity hereunder (an “**Indemnified Party**”), such Indemnified Party shall promptly notify the Person from whom indemnity is sought (the “**Indemnifying Party**”) in writing, and the Indemnifying Party shall have the right to assume the defense thereof, including the employment of counsel reasonably satisfactory to the Indemnified Party and the payment of all reasonable fees and expenses incurred in connection with defense thereof; *provided*, that the failure of any Indemnified Party to give such notice shall not relieve the Indemnifying Party of its obligations or liabilities pursuant to this Agreement, except (and only) to the extent that it shall be finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) that such failure shall have materially and adversely prejudiced the Indemnifying Party.

An Indemnified Party shall have the right to employ separate counsel in any such Proceeding and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party or Parties unless: (1) the Indemnifying Party has agreed in writing to pay such fees and expenses; (2) the Indemnifying Party shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Party in any such Proceeding; or (3) the named parties to any such Proceeding (including any impleaded parties) include both such Indemnified Party and the Indemnifying Party, and such Indemnified Party shall have been advised by counsel that a conflict of interest exists if the same counsel were to represent such Indemnified Party and the Indemnifying Party (in which case, if such Indemnified Party notifies the Indemnifying Party in writing that it elects to employ separate counsel at the expense of the Indemnifying Party, the Indemnifying Party shall not have the right to assume the defense thereof and such counsel shall be at the expense of the Indemnifying Party); *provided*, that the Indemnifying Party shall not be liable for the fees and expenses of more than one separate firm of attorneys at any time for all Indemnified Parties. The Indemnifying Party shall not be liable for any settlement of any such Proceeding effected without its written consent, which consent shall not be unreasonably withheld, delayed or conditioned. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any pending Proceeding in respect of which any Indemnified Party is a party, unless such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of such Proceeding.

Subject to the terms of this Agreement, all fees and expenses of the Indemnified Party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such Proceeding in a manner not inconsistent with this Section 7) shall be paid to the Indemnified Party, as incurred, within twenty (20) Trading Days of written notice thereof to the Indemnifying Party; *provided*, that the Indemnified Party shall promptly reimburse the Indemnifying Party for that portion of such fees and expenses applicable to such actions for which such Indemnified Party is finally judicially determined to not be entitled to indemnification hereunder). The failure to deliver written notice to the Indemnifying Party within a reasonable time of the commencement of any such action shall not relieve such Indemnifying Party of any liability to the Indemnified Party under this Section 7, except to the extent that the Indemnifying Party is materially and adversely prejudiced in its ability to defend such action.

(d)Contribution. If a claim for indemnification under Section 7(a) or 7(b) is unavailable to an Indemnified Party or insufficient to hold an Indemnified Party harmless for any Losses, then each Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Losses, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include, subject to the limitations set forth in this Agreement, any reasonable attorneys' or other reasonable fees or expenses incurred by such party in connection with any Proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section 7 was available to such party in accordance with its terms.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 7(d) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section 7(d), (A) no Holder shall be required to contribute, in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such Holder from the sale of the Registrable Securities subject to the Proceeding exceeds the amount of any damages that such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission and (B) no contribution will be made under circumstances where the maker of such contribution would not have been required to indemnify the Indemnified Party under the fault standards set forth in this Section 7. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

(e)The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may be available to any indemnified party at law or in equity or pursuant to any other agreement, including the Purchase Agreement; provided that the indemnities provided in this Section 7 shall survive the transfer of any Registrable Securities by the Holder.

8. Miscellaneous.

(a)Term. This Agreement shall terminate with respect to any Holder, (i) if all of the Registrable Securities held by such Holder have been sold in a registration pursuant to the Securities Act or pursuant to an exemption therefrom or (ii) if all of the Registrable Securities then owned by such Holder and its Affiliates could be sold in any ninety (90)-day period pursuant to Rule 144 without restriction as to volume or manner of sale and the restrictive legends and stop orders have been removed

from such Holder's Registrable Securities. Notwithstanding the foregoing, the rights and obligations of the parties set forth in Sections 7 and 8 shall survive the termination or expiration of this Agreement.

(b)Misstatements or Omissions. Notwithstanding any other provisions of this Agreement to the contrary, the Company shall cause (i) each Registration Statement (as of the effective date of such Registration Statement), any amendment thereof (as of the effective date thereof) or supplement thereto (as of its date), (A) to comply in all material respects with applicable SEC Guidance and (B) not to contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading, and (ii) any related Prospectus (including any preliminary Prospectus) or issuer free writing prospectus and any amendment thereof or supplement thereto, as of its date, (A) to comply in all material respects with applicable SEC Guidance and (B) not to contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, not misleading; provided, however, the Company shall have no such obligations or liabilities with respect to any written information pertaining to any Holder that is furnished in writing to the Company by or on behalf of such Holder specifically for inclusion therein or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and approved in writing by such Holder expressly for use in the Registration Statement, such Prospectus or such form of Prospectus or in any amendment or supplement thereto.

(c)Rules 144 and Regulation S. The Company covenants that it will file the reports required to be filed by it under the Securities Act and the Exchange Act and the rules and regulations adopted by the Commission thereunder (or, if the Company is not required to file such reports, it will, upon the reasonable request of any Holder, make publicly available such necessary information for so long as necessary to permit sales pursuant to Rules 144 or Regulation S under the Securities Act), and it will take such further action as any Holder may reasonably request, all to the extent required from time to time to enable the Holders, to sell Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by (i) Rules 144 or Regulation S under the Securities Act, as such Rules may be amended from time to time, or (ii) any similar rule or regulation hereafter adopted by the Commission. Upon the reasonable request of a Holder, the Company will deliver to such Holder a written statement as to whether it has complied with such requirements and, if not, the specifics thereof.

(d)Remedies. In the event of a breach by the Company or by a Holder of any of their obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, will be entitled to specific performance of its rights under this Agreement. The Company and each Holder agree that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall waive the defense that a remedy at law would be adequate.

(e)No Other Registration Rights. Other than pursuant to (i) the registration rights agreement by and among the Company and the other parties named therein dated August 6, 2016 and (ii) the Amended and Restated Investor Rights Agreement, dated August 8, 2013 by and between the Company and the stockholders named therein, as amended by the Amendment to Amended and Restated Investor Rights Agreement dated as of May 4, 2015, no Person has any right to cause the Company to effect the registration under the Securities Act covering the transfer of any securities of the Company and the Company shall not prior to the Effective Date enter into any agreement providing any such right to any of its security holders.

(f)Compliance. Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it (unless an exemption therefrom is available) in connection with sales of Registrable Securities pursuant to the Registration Statement and shall sell the Registrable Securities only in accordance with a method of distribution described in the Registration Statement.

(g)Additional Registration Statement. The Company covenants to file a New Registration Statement in the event that all of the Registrable Securities cannot be registered for resale as a secondary offering on a single registration statement pursuant to Section 2(a).

(h)Discontinued Disposition. If the Company shall furnish to the Holders a certificate signed by the Chief Executive Officer or equivalent senior executive officer of the Company advising such Holder of the occurrence of any event of the kind described in 5(c)(iii), (iv) and (vi), then the Company may suspend use of such Registration Statement covering the Registrable Securities (a “Shelf Suspension”); provided, however, that the Company shall not be permitted to exercise a Shelf Suspension more than twice, or for more than an aggregate of 45 calendar days, in each case, during any 12-month period. Each Holder agrees that, upon delivery of any certificate by the Company set forth in the first sentence of this Section, such Holder will forthwith discontinue disposition of Registrable Securities pursuant to the applicable Registration Statement until the Company informs such Holder in accordance with this Section 8(h) that the Shelf Suspension has been terminated. The Shelf Suspension shall not contain any material, non-public information of the Company. In the case of a Shelf Suspension, the Holders agree to suspend use of the applicable Prospectus and any issuer free writing prospectus in connection with any sale or purchase of, or offer to sell or purchase, Registrable Securities, upon delivery of the notice referred to above. The Company shall immediately notify the Holders upon the termination of any Shelf Suspension, amend or supplement the Prospectus and any issuer free writing prospectus, if necessary, so it does not contain a material misstatement of fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading and furnish to the Holders such numbers of copies of the Prospectus and any issuer free writing prospectus as so amended or supplemented as the Holders may reasonably request. The Company agrees, if necessary, to supplement or make amendments to each Registration Statement if required by the registration form used by the Company for the applicable Registration or by SEC Guidance, or as may reasonably be requested by any Holder.

(i)No Inconsistent Agreements. The Company is not currently a party to, and shall not hereafter enter into any agreement with respect to its securities that would have the effect of impairing the rights granted to the Holders by this Agreement or otherwise conflicts with the provisions hereof.

(j)Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, or waived unless the same shall be in writing and signed by the Company and each of the Holders who, together with its affiliates, then holds at least 700,000 shares of Registrable Securities (subject to adjustment for stock splits, combinations, dividends, recapitalizations and the like following the date hereof), *provided*, that any party may give a waiver as to itself. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of a given Holder and that does not directly or indirectly affect the rights of other Holders may be given by Holders of all of the Registrable Securities to which such waiver or consent relates; *provided, however*, that the provisions of this sentence may not be amended, modified, or supplemented except in accordance with the provisions of the immediately preceding sentence.

(k)Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be delivered as set forth in the Purchase Agreement.

(l)Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the parties and their successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. The rights and obligations set forth herein may not be assigned, in whole or in part, by any Purchaser without the Company's prior written consent.

(m)Binding Effect. Except as otherwise provided in this Agreement, the terms and provisions of this Agreement shall be binding on and inure to the benefit of each of the parties hereto and their respective successors.

(n)Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended or shall be construed to confer upon any Person not a party hereto (other than those Persons entitled to indemnity or contribution hereunder, each of whom shall be a third party beneficiary thereof) any right, remedy or claim under or by virtue of this Agreement.

(o)Execution and Counterparts. This Agreement may be executed in two or more counterparts, each of which when so executed shall be deemed to be an original and, all of which taken together shall constitute one and the same Agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature were the original thereof.

(p)Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be determined in accordance with the provisions of the Purchase Agreement.

(q)Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any other remedies provided by law.

(r)Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their good faith reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

(s)Headings. The headings in this Agreement are for convenience only and shall not limit or otherwise affect the meaning hereof.

(t)Recapitalization. The provisions of this Agreement shall apply to the full extent set forth herein with respect to any and all equity securities of the Company or any successor or assign of the Company (whether by merger, consolidation, sale of assets or otherwise) which may be issued in respect of, in conversion of, in exchange for or in substitution of, the Registrable Securities and shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof.

(u)Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser hereunder, and no Purchaser shall be responsible in any way for the performance of the obligations of any other Purchaser hereunder. The decision of each Purchaser to purchase the Securities pursuant to the Transaction Documents has been made independently of any other Purchaser. Nothing contained herein or in any other agreement or document delivered at any closing, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert with respect to such obligations or the transactions contemplated by this Agreement. Each Purchaser acknowledges that no other Purchaser has acted as agent for such Purchaser in connection with making its investment hereunder and that no Purchaser will be acting as agent of such Purchaser in connection with monitoring its investment in the Securities or enforcing its rights under the Transaction Documents. Each Purchaser shall be entitled to protect and enforce its rights, including, without limitation, the rights arising out of this Agreement, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. The Company acknowledges that each of the Purchasers has been provided with the same Registration Rights Agreement for the purpose of

closing a transaction with multiple Purchasers and not because it was required or requested to do so by any Purchaser.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

above. IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written

COMPANY: FATE THERAPEUTICS, INC.

By: /s/ J. Scott Wolchko
Name: J. Scott Wolchko
Title: President and Chief Executive Officer

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IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

PURCHASERS:

Redmile Capital Fund, LP

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of the General Partner and the Investment

Redmile Capital Offshore Fund, Ltd.

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of the Investment Manager

Redmile Capital Offshore Fund II, Ltd.

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of the Investment Manager

Redmile Special Opportunities Fund, Ltd.

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of the Investment Manager

Redmile Capital Offshore Fund (ERISA), Ltd.

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of the Investment Manager

[Signature Page to Registration Rights Agreement]

Redmile Biopharma Investments I, L.P.

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of the General Partner and/or Management Company

P Redmile, Ltd.

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of Redmile Group, LLC, Investment Adviser to P Redmile, Ltd.

LMA SPC for and o/b/o MAP 20 Segregated Portfolio

By: /s/ Jeremy Green
Jeremy Green
Title Managing Member of Redmile Group, LLC, Investment Adviser to LMA SPC for and o/b/o MAP 20 Segregated Portfolio

[Signature Page to Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

NAME OF PURCHASER:

Biotechnology Value Fund, LP

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor

San Francisco, CA 94104

BIOTECHNOLOGY VALUE FUND II, LP

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor

San Francisco, CA 94104

BIOTECHNOLOGY VALUE TRADING FUND OS L.P

By: /s/ Mark Lampert

Name: Mark Lampert

Title: CEO, Portfolio Manager

Address:

One Sansome Street, 30th Floor

San Francisco, CA 94104

[Signature Page to Registration Rights Agreement]

INVESTMENT 10, L.L.C.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: CEO, Portfolio Manager

Address:
One Sansome Street, 30th Floor
San Francisco, CA 94104

MSI BVF SPV, L.L.C.

By: /s/ Mark Lampert
Name: Mark Lampert
Title: CEO, Portfolio Manager

Address:
One Sansome Street, 30th Floor
San Francisco, CA 94104

[Signature Page to Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

NAME OF PURCHASER:

Ecor1 Capital Fund Qualified, LP

By: /s/ Oleg Nodelman
Name: Oleg Nodelman
Title: Manager, EcoR1 Capital LLC, as GP

Address:
409 Illinois Street, San Francisco, CA 94158

EcoR1 Capital Fund, LP

By: /s/ Oleg Nodelman
Name: Oleg Nodelman
Title: Manager, EcoR1 Capital LLC, as GP

Address:
409 Illinois Street, San Francisco, CA 94158

[Signature Page to Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

NAME OF PURCHASER:

Franklin Templeton Investment Funds – Franklin Biotechnology Discovery Fund

By: Franklin Advisers, Inc., as investment manager

By: /s/ Evan McCulloch

Name: Evan McCulloch

Title: Vice President

Address:

c/o Franklin Advisers, Inc., One Franklin Parkway, San Mateo, California 94403

Franklin Strategic Series – Franklin Biotechnology Discovery Fund

By: Franklin Advisers, Inc., as investment manager

By: /s/ Evan McCulloch

Name: Evan McCulloch

Title: Vice President

Address:

c/o Franklin Advisers, Inc., One Franklin Parkway, San Mateo, California 94403

[Signature Page to Registration Rights Agreement]

IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

NAME OF PURCHASERS:

SARAH GORDON WILD

By: /s/ Sarah Gordon Wild

Name: Sarah Gordon Wild

Address: [address]

[address]

[Signature Page to Registration Rights Agreement]



Fate Therapeutics Announces Private Financing

San Diego, CA – November 22, 2016 – Fate Therapeutics, Inc. (NASDAQ: FATE), a biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders, today announced that it has entered into a definitive securities purchase agreement with certain institutional and other accredited investors. The private placement is being led by Redmile Group LLC with participation from BVF Partners L.P., EcoR1 Capital LLC and Franklin Advisers, Inc. as well as certain individual investors including members of the Company's Board of Directors. Gross proceeds from the private placement are expected to be approximately \$57 million dollars.

Redmile has agreed to purchase 2,819,549 shares of non-voting Class A Preferred Stock at \$13.30 per share, each of which is convertible into five shares of common stock upon certain conditions. The remaining investors have agreed to purchase 7,236,837 shares of common stock at \$2.66 per share. The purchase and sale is expected to close on or about November 23, 2016, subject to customary closing conditions.

The Company expects to use the proceeds from the transaction primarily to advance its pipeline of programmed cellular immunotherapies and for general corporate purposes. Leerink Partners LLC acted as the exclusive placement agent to the Company in connection with the private financing.

The offer and sale of the foregoing securities are being made in a transaction not involving a public offering and have not been registered under the Securities Act of 1933, as amended (the Securities Act), or applicable state securities laws. Accordingly, the securities may not be reoffered or resold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements of the Securities Act and such applicable state securities laws. As part of the transaction, the Company has agreed to file a registration statement with the Securities and Exchange Commission for purposes of registering the resale by the investors not affiliated with the Company of the shares of common stock purchased by such investors.

This press release is issued pursuant to Rule 135(c) under the Securities Act of 1933, as amended, and does not constitute an offer to sell or the solicitation of an offer to buy the securities, nor shall there be any sale of the securities in any state in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of such state. Any offering of the securities under the resale registration statement will only be by means of a prospectus.

About Fate Therapeutics, Inc.

Fate Therapeutics is a biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders. The Company's hematopoietic cell therapy

pipeline is comprised of NK- and T-cell immuno-oncology programs, including off-the-shelf product candidates derived from engineered induced pluripotent cells, and immuno-regulatory programs, including product candidates to prevent life-threatening complications in patients undergoing hematopoietic cell transplantation and to promote immune tolerance in patients with autoimmune disease. Its adoptive cell therapy programs are based on the Company's novel *ex vivo* cell programming approach, which it applies to modulate the therapeutic function and direct the fate of immune cells. Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit www.fatetherapeutics.com.

Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the timing of the consummation of the private placement and the expected receipt and use of proceeds from the private placement. These and any other forward-looking statements in this release are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk that the closing conditions for the private placement transaction are not met by the expected closing date or at all, the risk that the resale registration statement covering the common stock is not timely filed by the Company or declared effective by the Securities and Exchange Commission (SEC), the risk that the Company may not use the proceeds from the private placement as currently expected, the risk that the Company may cease or delay preclinical or clinical development activities for any of its existing or future product candidates for a variety of reasons (including difficulties or delays in patient enrollment in current and planned clinical trials), and the risk that the Company may not be able to raise the additional funding required for its business and product development plans. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the risks and uncertainties detailed in the Company's periodic filings with the Securities and Exchange Commission, including but not limited to the Company's most recently filed periodic report, and from time to time the Company's other investor communications. Fate Therapeutics is providing the information in this release as of this date and does not undertake any obligation to update any forward-looking statements contained in this release as a result of new information, future events or otherwise.

Contact:

Christina Tartaglia
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