

FATE THERAPEUTICS INC
Form S-3ASR
November 21, 2018
Table of Contents

As filed with the Securities and Exchange Commission on November 21, 2018

Registration No. 333-

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

FATE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

65-1311552
(I.R.S. Employer
Identification Number)

Edgar Filing: FATE THERAPEUTICS INC - Form S-3ASR

3535 General Atomics Court, Suite 200

San Diego, CA 92121

(858) 875-1800

(Address, including zip code, and telephone number, including area code, of principal executive offices)

J. Scott Wolchko

President and Chief Executive Officer

Fate Therapeutics, Inc.

3535 General Atomics Court, Suite 200

San Diego, CA 92121

(858) 875-1800

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With copies to:

Cindy Tahl, Esq.

General Counsel and Corporate Secretary

Fate Therapeutics, Inc.

3535 General Atomics Court, Suite 200

San Diego, CA 92121

(858) 875-1800

Kingsley L. Taft, Esq.

Maggie L. Wong, Esq.

Goodwin Procter LLP

3 Embarcadero Center

San Francisco, CA 94111

(415) 733-6000

Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Table of Contents

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of large accelerated filer, accelerated filer, smaller reporting company and emerging growth company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Primary Offering of Securities:		
Common Stock	(2)	(3)
Preferred Stock	(2)	(3)
Debt Securities	(2)	(3)
Warrants	(2)	(3)
Units(4)	(2)	(3)
Primary Offering of Common Stock:		
Common Stock	\$50,000,000	\$6,060(5)
Total(6)	\$50,000,000	\$6,060

(1) An indeterminate amount of common stock, preferred stock, debt securities, warrants and/or units. There is also being registered hereunder such currently indeterminate number of (i) shares of common stock or other securities of the registrant as may be issued upon conversion of, or in exchange for, convertible or exchangeable debt

securities and/or preferred stock registered hereby, or (ii) shares of preferred stock, common stock, debt securities or units as may be issued upon exercise of warrants registered hereby, as the case may be. Any securities registered hereunder may be sold separately or as units with the other securities registered hereunder. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the Securities Act), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or pursuant to anti-dilution provisions of any of the securities.

- (2) Not applicable pursuant to General Instruction II.E. of Form S-3 under the Securities Act.
- (3) In accordance with Rules 456(b) and 457(r) under the Securities Act, the registrant is deferring payment of all registration fees and will pay the registration fees subsequently in advance or on a pay-as-you-go basis. Separate consideration may or may not be received for securities that are issuable upon conversion, exercise or exchange of other securities.
- (4) Each unit will be issued under a unit agreement and will represent an interest in two or more securities, which may or may not be separable from one another.
- (5) Calculated pursuant to Rule 457(o) and Rule 457(r) under the Securities Act.
- (6) The securities registered hereunder may be sold separately or in a combination with other securities registered hereby. Does not include registration fees deferred in accordance with Rules 456(b) and 457(r) under the Securities Act, as described in Note (3) above.

Table of Contents

EXPLANATORY NOTE

This registration statement contains two prospectuses:

a base prospectus which covers the offering, issuance and sale by us of the securities identified above from time to time in one or more offerings; and

a sales agreement prospectus covering the offering, issuance and sale by us of up to a maximum aggregate offering price of \$50,000,000 of our common stock that may be issued and sold under a sales agreement with Leerink Partners LLC.

The base prospectus immediately follows this explanatory note. The specific terms of any other securities to be offered pursuant to the base prospectus will be specified in one or more prospectus supplements to the base prospectus. The sales agreement prospectus immediately follows the base prospectus.

Table of Contents

PROSPECTUS

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

We may from time to time issue, in one or more series or classes, our common stock, preferred stock, debt securities, warrants and/or units. We may offer these securities separately or together in units. We will specify in any accompanying prospectus supplement the terms of the securities being offered. See Plan of Distribution below for additional information on how we may conduct sales of our common stock, preferred stock, debt securities, warrants and/or units.

The securities offered by us in this prospectus may be sold directly to investors, to or through underwriters and also to other purchasers or through agents. We will set forth the names of any underwriters or agents, and any fees, conversions or discount arrangements, in any accompanying prospectus supplement. We may not sell any securities under this prospectus without delivery of the applicable prospectus supplement.

You should read this document and any prospectus supplement or amendment carefully before you invest in our securities.

Our common stock is listed on The Nasdaq Global Market under the symbol FATE. On November 19, 2018, the closing price for our common stock, as reported on The Nasdaq Global Market, was \$12.29 per share. Our principal executive offices are located at 3535 General Atomics Court, Suite 200, San Diego, CA 92121.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading Risk Factors contained in this prospectus beginning on page 2 and any applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

This prospectus may not be used to offer or sell securities unless accompanied by a prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is November 21, 2018.

Table of Contents

TABLE OF CONTENTS

	Page
<u>About this Prospectus</u>	1
<u>Risk Factors</u>	2
<u>Cautionary Statement Regarding Forward-Looking Statements</u>	3
<u>The Company</u>	5
<u>Use of Proceeds</u>	6
<u>Securities We May Offer</u>	7
<u>Description of Capital Stock</u>	8
<u>Description of Debt Securities</u>	14
<u>Description of Warrants</u>	21
<u>Description of Units</u>	22
<u>Plan of Distribution</u>	25
<u>Legal Matters</u>	28
<u>Experts</u>	29
<u>Where You Can Find More Information</u>	30
<u>Incorporation by Reference</u>	31

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process as a well-known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under this shelf registration process, we may from time to time sell any combination of the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide one or more prospectus supplements that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any accompanying prospectus supplement together with the additional information described under the heading **Where You Can Find More Information**.

You should rely only on the information contained in or incorporated by reference in this prospectus, any accompanying prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and any accompanying prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in such accompanying prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

Unless the context otherwise indicates, references in this prospectus to **Fate Therapeutics**, **we**, **our**, **us** and **the Company** refer, collectively, to Fate Therapeutics, Inc., a Delaware corporation, and its subsidiaries.

Table of Contents

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks described below and in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described below and in the documents incorporated herein by reference, including (i) our annual report on Form 10-K for the year ended December 31, 2017, which is on file with the SEC and is incorporated herein by reference, (ii) our quarterly reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, which are on file with the SEC and are incorporated herein by reference, and (iii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, even if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. All statements other than statements of historical facts contained in this prospectus and any accompanying prospectus supplement or the documents incorporated by reference herein, are forward-looking statements. In some cases, you can identify forward-looking statements by words such as anticipate, believe, contemplate, continue, could, estimate, expect, intend, may, plan, potential, predict, target, will, would, or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

the initiation, timing, progress and results of our ongoing and planned clinical trials, preclinical studies, and research and development programs;

our ability to advance our product candidates into clinical development, including under the IND application for our FT500 product candidate, and to successfully conduct and complete clinical trials;

the timing and likelihood of, and our ability to obtain and maintain regulatory approval of our product candidates;

the potential benefits of strategic collaboration agreements and our ability, and the ability of our collaborators, to successfully develop product candidates under the respective collaborations, including the recent collaboration agreement entered into with Ono Pharmaceutical Co. Ltd.;

our ability to enroll patients in our ongoing and planned clinical trials in a timely manner;

the performance of third parties in connection with the development and manufacture of our product candidates, including third parties conducting our clinical trials as well as third-party suppliers and manufacturers;

our ability to manufacture our product candidates for clinical development and, if approved, for commercialization, and the timing and costs of such manufacture;

our ability to develop sales and marketing capabilities, whether alone or with actual or potential collaborators, to commercialize our product candidates, if approved;

our ability to successfully commercialize our product candidates, if approved;

the size and growth of the potential markets for our product candidates and our ability to serve those markets;

regulatory developments and approval pathways in the United States and foreign countries for our product candidates;

the potential scope and value of our intellectual property rights;

our ability, and the ability of our licensors, to obtain, maintain, defend and enforce intellectual property rights protecting our product candidates, and our ability to develop and commercialize our product candidates without infringing the proprietary rights of third parties;

our ability to retain and recruit key personnel;

our ability to obtain funding for our operations;

the implementation of our business model, strategic plans for our business, product candidates and technology;

Table of Contents

the accuracy of our estimates regarding our expenses, ongoing losses, capital requirements and revenues;

developments relating to our competitors and our industry; and

other risks and uncertainties, including those described or incorporated by reference under the caption "Risk Factors" in this prospectus and any prospectus supplement that we may file.

Any forward-looking statements in this prospectus, including the documents that we incorporate by reference, reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those referenced in the section "Risk Factors" and elsewhere in this prospectus and the documents that we incorporate by reference. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This prospectus, including the documents that we incorporate by reference, contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

Table of Contents

THE COMPANY

We are a clinical-stage biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders. We are developing first-in-class cell therapy product candidates based on a simple notion: we believe that better cell therapies start with better cells.

To create better cell therapies, we use a therapeutic approach that we generally refer to as cell programming. For certain of our cell therapy product candidates, we use pharmacologic modulators, such as small molecules, to enhance the biological properties and therapeutic function of cells *ex vivo* before our product candidates are administered to a patient. In other cases, we use human induced pluripotent stem cells (iPSCs) to generate a clonal master iPSC line having preferred biological properties and direct the fate of the clonal master iPSC line to create a homogeneous population of our cell therapy product candidate. We believe clonal master iPSC lines may serve as a renewable source for manufacturing cell therapy products which are well-defined and uniform in composition, can be mass produced at significant scale in a cost-effective manner, and can be delivered off-the-shelf to treat many patients. Fate Therapeutics' iPSC product platform is supported by an intellectual property portfolio of over 100 issued patents and 100 pending patent applications.

Utilizing these therapeutic approaches, we program cells of the immune system, including natural killer (NK) cells, T cells and CD34+ cells, and are advancing a pipeline of programmed cellular immunotherapies in the therapeutic areas of immuno-oncology and immuno-regulation.

We have entered into a research collaboration and license agreement with the Regents of the University of Minnesota to develop off-the-shelf NK cell cancer immunotherapies derived from clonal master iPSC lines. Additionally, we have entered into a research collaboration and license agreement with Memorial Sloan Kettering Cancer Center to develop off-the-shelf, engineered T-cell cancer immunotherapies derived from clonal master iPSC lines.

We have also entered into a collaboration and option agreement with Ono Pharmaceutical Co. Ltd. for the joint development and commercialization of two off-the-shelf, iPSC-derived chimeric antigen receptor (CAR) T-cell product candidates, and a research collaboration and license agreement with Juno Therapeutics, Inc. to identify and apply small molecule modulators to enhance the therapeutic function of genetically-engineered CAR T-cell and TCR (T-cell receptor) immunotherapies.

We are also party to an exclusive license agreement with J. David Gladstone Institutes under which we obtained an exclusive license to certain patents and patent applications for the research, development, manufacturing, and commercialization of human therapeutics derived from iPSCs.

We were incorporated in Delaware in 2007 and our principal executive offices are located at 3535 General Atomics Court, Suite 200, San Diego, CA 92121 and our telephone number is (858) 875-1800.

Table of Contents

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered by us under this prospectus for working capital and general corporate purposes, unless otherwise indicated in the applicable prospectus supplement. The amounts and timing of our use of the net proceeds from the sale of any securities offered under this prospectus will depend on a number of factors, such as the timing and progress of our and our strategic partners' clinical trials of our product candidates and our development efforts, the timing and progress of any partnering efforts, technological advances and the competitive environment for our product candidates. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from any securities offered under this prospectus. Accordingly, our management will have broad discretion in the timing and application of any such proceeds. Pending application of any net proceeds as described above, we intend to temporarily invest any proceeds in short-term, interest-bearing instruments.

Table of Contents

SECURITIES WE MAY OFFER

This prospectus contains summary descriptions of the securities we may offer from time to time. This prospectus provides you with a general description of the securities we may offer. These summary descriptions are not meant to be complete descriptions of each security. The particular terms of any security we may offer will be described in the applicable prospectus supplement.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of our capital stock. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our certificate of incorporation and bylaws, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our common stock and preferred stock may also be affected by Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of 150,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.001 per share. 2,819,549 shares of our authorized preferred stock have been designated as Class A Convertible Preferred Stock. As of November 19, 2018, we had 64,602,900 shares of common stock outstanding and 2,819,549 shares of Class A Convertible Preferred Stock outstanding.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by the board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. All outstanding shares are fully paid and nonassessable.

When we issue shares of common stock under this prospectus, the shares will be fully paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

Exchange Listing

Our common stock is listed on The Nasdaq Global Market under the symbol FATE. On November 19, 2018, the closing price for our common stock, as reported on The Nasdaq Global Market, was \$12.29 per share. As of November 19, 2018, we had approximately 43 stockholders of record.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, NY 11219.

Preferred Stock

Undesignated Preferred Stock

Our board of directors was initially authorized to issue up to 5,000,000 shares of preferred stock in one or more series without stockholder approval. As a result of the designation and issuance of 2,819,549 shares of Class A Convertible

Edgar Filing: FATE THERAPEUTICS INC - Form S-3ASR

Preferred Stock described below, our board of directors is authorized to designate and issue up to 2,180,451 remaining shares of preferred stock. Our board of directors may determine the rights, preferences,

Table of Contents

privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock, any or all of which may be more favorable than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action.

The purpose of authorizing our board of directors to issue preferred stock in one or more series and determine the number of shares in the series and its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. Examples of rights and preferences that the Board may fix are:

dividend rights;

dividend rates;

conversion rights;

voting rights;

terms of redemption; and

liquidation preferences.

The existence of authorized but unissued shares of undesignated preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer, stockholder or stockholder group. The rights of holders of our common stock described above, will be subject to, and may be adversely affected by, the rights of any preferred stock that we may designate and issue in the future. The issuance of shares of undesignated preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Class A Convertible Preferred Stock

We filed a Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock with the Secretary of State of Delaware on November 22, 2016 (the Certificate of Designation), pursuant to which we designated 2,819,549 shares of authorized and unissued preferred stock as Class A Convertible Preferred Stock (the Preferred Shares). Each Preferred Share is convertible into five shares of common stock (subject to adjustment for stock dividends, stock splits, combinations and the like). The holders of the Preferred Shares, which currently consist

of entities affiliated with Redmile Group, LLC (Redmile), are prohibited from converting the Preferred Shares into shares of common stock if, as a result of such conversion, Redmile, together with its affiliates, would own more than 9.99% of the shares of our common stock then issued and outstanding (the Redmile Percentage Limitation), which percentage may change at Redmile s election upon 61 days notice to us to (i) any other number less than or equal to 19.99% or (ii) subject to approval of our stockholders to the extent required in accordance with the Nasdaq Global Market rules (the Requisite Approval), any number in excess of 19.99%. On May 2, 2017, our stockholders approved the issuance of up to an aggregate of 14,097,745 shares of common stock upon the conversion of the 2,819,549 outstanding Preferred Shares. As a result, Redmile has the right to increase the Redmile Percentage Limitation to any percentage in excess of 19.99% at its election upon 61 days notice to us. Additionally, in the event of certain fundamental transactions, including (i) any merger or consolidation of our company with or into another entity; (ii) our sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of our assets; (iii) the acceptance by holders of

Table of Contents

35% or more of our outstanding common stock of any purchase offer, tender offer or exchange offer pursuant to which such holders are permitted to sell, tender or exchange their shares for other securities, cash or property; (iv) 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; or (v) any other business combination pursuant to which a third party acquires more than 50% of our outstanding shares of Common Stock, each share of Class A Convertible Preferred Stock outstanding immediately prior to such fundamental transaction will automatically convert into shares of common stock at the applicable conversion ratio then in effect.

In the event of our liquidation, dissolution or winding up, holders of Preferred Shares will participate *pari passu* with the holders of our 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. Holders of the Preferred Shares are entitled to receive, on an as-converted-to-common-stock basis, dividends that are equal to dividends actually paid on shares of common stock, when, as and if such dividends are paid on shares of the common stock.

In addition, Redmile has the right to designate an individual to attend all meetings of our board of directors in a non-voting observer capacity, which right is non-assignable and shall terminate upon the earlier of (i) November 21, 2019 or (ii) the date upon which Redmile's total ownership no longer exceeds 15% of our total outstanding shares of common stock on an as-converted basis (without giving effect to the Redmile Percentage Limitation).

Additional Series of Preferred Stock

We will incorporate by reference as an exhibit to the registration statement, which includes this prospectus, the form of any certificate of designation that describes the terms of any additional series of preferred stock we may offer pursuant to this prospectus. This description and the applicable prospectus supplement will include:

the title and stated value;

the number of shares authorized;

the liquidation preference per share;

the purchase price;

the dividend rate, period and payment date, and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;

whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;

voting rights, if any, of the preferred stock;

preemptive rights, if any;

Table of Contents

restrictions on transfer, sale or other assignment, if any;

whether interests in the preferred stock will be represented by depositary shares;

a discussion of any material United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

When we issue shares of preferred stock under this prospectus, the shares will fully be paid and nonassessable and will not be subject to any preemptive or similar rights.

Provisions of our Certificate of Incorporation and Bylaws and Delaware Anti-Takeover Law

Certain provisions of the Delaware General Corporation Law and of our certificate of incorporation and bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Provisions of our Certificate of Incorporation and Bylaws. Our certificate of incorporation and bylaws include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies. Our certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board,

may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No Written Consent of Stockholders. Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

Meetings of Stockholders. Our certificate of incorporation and bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters

Table of Contents

set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements. Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices.

Amendment to Certificate of Incorporation and Bylaws. As required by the Delaware General Corporation Law, any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, limitation of liability and the amendment of our certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock. Our certificate of incorporation provides for 5,000,000 authorized shares of preferred stock, of which 2,819,549 shares have been designated as Class A Convertible Preferred Stock. The existence of authorized but unissued shares of undesignated preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Delaware Anti-Takeover Law. We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A business combination includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. In general, Section 203 defines an interested stockholder as any person or entity who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

before the stockholder became interested, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

Table of Contents

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or

at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Exclusive Jurisdiction of Certain Actions. Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (iv) any action asserting a claim against us governed by the internal affairs doctrine. Although we believe this provision benefits us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar exclusive forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could rule that this provision in our certificate of incorporation is inapplicable or unenforceable.

Table of Contents

DESCRIPTION OF DEBT SECURITIES

This section describes the general terms and provisions of our debt securities that we may issue from time to time. We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, the applicable prospectus supplement or free writing prospectus will describe the specific terms of any debt securities offered through that prospectus supplement or free writing prospectus. The terms of any debt securities we offer under a prospectus supplement or free writing prospectus may differ from the terms we describe below. Unless the context requires otherwise, whenever we refer to the indentures, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue any senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture that we will enter into with the trustee named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We use the term trustee to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement or free writing prospectus and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete applicable indenture that contains the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

General

We will describe in the applicable prospectus supplement or free writing prospectus the terms of the series of debt securities being offered, including:

the title;

the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;

any limit on the amount that may be issued;

whether or not we will issue the series of debt securities in global form, and, if so, the terms and who the depository will be;

the maturity date;

whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

Table of Contents

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt;

the place where payments will be payable;

restrictions on transfer, sale or other assignment, if any;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option, to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

whether the indenture will restrict our ability or the ability of our subsidiaries to:

incur additional indebtedness;

issue additional securities;

create liens;

pay dividends or make distributions in respect of our capital stock or the capital stock of our subsidiaries;

redeem capital stock;

place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;

make investments or other restricted payments;

sell or otherwise dispose of assets;

enter into sale-leaseback transactions;

engage in transactions with stockholders or affiliates;

issue or sell stock of our subsidiaries; or

effect a consolidation or merger;

whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of certain material or special United States federal income tax considerations applicable to the debt securities;

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

the applicability of the provisions in the indenture on discharge;

whether the debt securities are to be offered at a price such that they will be deemed to be offered at an original issue discount as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and

Table of Contents

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations or advisable in connection with the marketing of the debt securities.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement or free writing prospectus the terms on which a series of debt securities may be convertible into or exchangeable for our common stock, our preferred stock or other securities (including securities of a third-party). We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock, our preferred stock or other securities (including securities of a third-party) that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for other securities of ours or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default Under the Indenture

Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended;

if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable at maturity, upon redemption or repurchase or otherwise, and the time for payment has not been extended;

if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and

if specified events of bankruptcy, insolvency or reorganization occur.

We will describe in each applicable prospectus supplement or free writing prospectus any additional events of default relating to the relevant series of debt securities.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the unpaid principal, premium, if any, and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

Table of Contents

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity or security satisfactory to it against any loss, liability or expense. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

the direction so given by the holder is not in conflict with any law or the applicable indenture; and

subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

the holder has given written notice to the trustee of a continuing event of default with respect to that series;

the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the trustee or security satisfactory to it against any loss, liability or expense or to be incurred in compliance with instituting the proceeding as trustee; and

the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities, or other defaults that may be specified in the applicable prospectus supplement or free writing prospectus.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

Subject to the terms of the indenture for any series of debt securities that we may issue, we and the trustee may change an indenture without the consent of any holders with respect to the following specific matters:

to fix any ambiguity, defect or inconsistency in the indenture;

to comply with the provisions described above under Description of Our Debt Securities Consolidation, Merger or Sale;

to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act;

to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;

Table of Contents

to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under Description of Our Debt Securities General, to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;

to evidence and provide for the acceptance of appointment hereunder by a successor trustee;

to provide for uncertificated debt securities and to make all appropriate changes for such purpose;

to add to our covenants such new covenants, restrictions, conditions or provisions for the benefit of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred to us in the indenture; or

to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, subject to the terms of the indenture for any series of debt securities that we may issue or as otherwise provided in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

extending the stated maturity of the series of debt securities;

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption or repurchase of any debt securities; or

reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that, subject to the terms of the indenture and any limitation otherwise provided in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the trustee;

compensate and indemnify the trustee; and

appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium and interest on, the debt securities of the series on the dates payments are due.

Table of Contents

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement or free writing prospectus, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement or free writing prospectus with respect to that series.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement or free writing prospectus, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement or free writing prospectus, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement or free writing prospectus the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series. If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs.

Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

Table of Contents

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement or free writing prospectus any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Ranking of Debt Securities

The subordinated debt securities will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement or free writing prospectus. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

The senior debt securities will rank equally in right of payment to all our other senior unsecured debt. The senior indenture does not limit the amount of senior debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

Table of Contents

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement, which includes this prospectus.

General

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate warrant agreement. We will enter into the warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;

in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the periods during which, and places at which, the warrants are exercisable;

the manner of exercise;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreement and warrants may be modified;

federal income tax consequences of holding or exercising the warrants;

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Table of Contents

DESCRIPTION OF UNITS

We may issue units comprised of shares of common stock, shares of preferred stock, debt securities and warrants in any combination. We may issue units in such amounts and in as many distinct series as we wish. This section outlines certain provisions of the units that we may issue. If we issue units, they will be issued under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. The information described in this section may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units offered will be described in the applicable prospectus supplement. If so described in a particular supplement, the specific terms of any series of units may differ from the general description of terms presented below. We urge you to read any prospectus supplement related to any series of units we may offer, as well as the complete unit agreement and unit certificate that contain the terms of the units. If we issue units, forms of unit agreements and unit certificates relating to such units will be incorporated by reference as exhibits to the registration statement, which includes this prospectus.

Each unit that we may issue will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The applicable prospectus supplement may describe:

the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

any provisions of the governing unit agreement;

the price or prices at which such units will be issued;

the applicable United States federal income tax considerations relating to the units;

any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and

any other terms of the units and of the securities comprising the units.

The provisions described in this section, as well as those described under [Description of Capital Stock](#), [Description of Debt Securities](#) and [Description of Warrants](#) will apply to the securities included in each unit, to the extent relevant and as may be updated in any prospectus supplements.

Issuance in Series

We may issue units in such amounts and in as many distinct series as we wish. This section summarizes terms of the units that apply generally to all series. Most of the financial and other specific terms of a particular series of units will

be described in the applicable prospectus supplement.

Unit Agreements

We will issue the units under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We may add, replace or terminate unit agents from time to time. We will identify the unit agreement under which each series of units will be issued and the unit agent under that agreement in the applicable prospectus supplement.

Table of Contents

The following provisions will generally apply to all unit agreements unless otherwise stated in the applicable prospectus supplement:

Modification without Consent

We and the applicable unit agent may amend any unit or unit agreement without the consent of any holder:

to cure any ambiguity; any provisions of the governing unit agreement that differ from those described below;

to correct or supplement any defective or inconsistent provision; or

to make any other change that we believe is necessary or desirable and will not adversely affect the interests of the affected holders in any material respect.

We do not need any approval to make changes that affect only units to be issued after the changes take effect. We may also make changes that do not adversely affect a particular unit in any material respect, even if they adversely affect other units in a material respect. In those cases, we do not need to obtain the approval of the holder of the unaffected unit; we need only obtain any required approvals from the holders of the affected units.

Modification with Consent

We may not amend any particular unit or a unit agreement with respect to any particular unit unless we obtain the consent of the holder of that unit, if the amendment would:

impair any right of the holder to exercise or enforce any right under a security included in the unit if the terms of that security require the consent of the holder to any changes that would impair the exercise or enforcement of that right; or

reduce the percentage of outstanding units or any series or class the consent of whose holders is required to amend that series or class, or the applicable unit agreement with respect to that series or class, as described below.

Any other change to a particular unit agreement and the units issued under that agreement would require the following approval:

If the change affects only the units of a particular series issued under that agreement, the change must be approved by the holders of a majority of the outstanding units of that series; or

If the change affects the units of more than one series issued under that agreement, it must be approved by the holders of a majority of all outstanding units of all series affected by the change, with the units of all the affected series voting together as one class for this purpose.

These provisions regarding changes with majority approval also apply to changes affecting any securities issued under a unit agreement, as the governing document.

In each case, the required approval must be given by written consent.

Unit Agreements Will Not Be Qualified under Trust Indenture Act

No unit agreement will be qualified as an indenture, and no unit agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of units issued under unit agreements will not have the protections of the Trust Indenture Act with respect to their units.

Mergers and Similar Transactions Permitted; No Restrictive Covenants or Events of Default

The unit agreements will not restrict our ability to merge or consolidate with, or sell our assets to, another corporation or other entity or to engage in any other transactions. If at any time we merge or consolidate with, or

Table of Contents

sell our assets substantially as an entirety to, another corporation or other entity, the successor entity will succeed to and assume our obligations under the unit agreements. We will then be relieved of any further obligation under these agreements.

The unit agreements will not include any restrictions on our ability to put liens on our assets, nor will they restrict our ability to sell our assets. The unit agreements also will not provide for any events of default or remedies upon the occurrence of any events of default.

Governing Law

The unit agreements and the units will be governed by Delaware law.

Form, Exchange and Transfer

We will issue each unit in global i.e., book-entry form only. Units in book-entry form will be represented by a global security registered in the name of a depositary, which will be the holder of all the units represented by the global security. Those who own beneficial interests in a unit will do so through participants in the depositary's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depositary and its participants. We will describe book-entry securities, and other terms regarding the issuance and registration of the units in the applicable prospectus supplement.

Each unit and all securities comprising the unit will be issued in the same form.

If we issue any units in registered, non-global form, the following will apply to them.

The units will be issued in the denominations stated in the applicable prospectus supplement. Holders may exchange their units for units of smaller denominations or combined into fewer units of larger denominations, as long as the total amount is not changed.

Holdings may exchange or transfer their units at the office of the unit agent. Holdings may also replace lost, stolen, destroyed or mutilated units at that office. We may appoint another entity to perform these functions or perform them ourselves.

Holdings will not be required to pay a service charge to transfer or exchange their units, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may also require an indemnity before replacing any units.

If we have the right to redeem, accelerate or settle any units before their maturity, and we exercise our right as to less than all those units or other securities, we may block the exchange or transfer of those units during the period beginning 15 days before the day we mail the notice of exercise and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any unit selected for early settlement, except that we will continue to permit transfers and

exchanges of the unsettled portion of any unit being partially settled. We may also block the transfer or exchange of any unit in this manner if the unit includes securities that are or may be selected for early settlement.

Only the depositary will be entitled to transfer or exchange a unit in global form, since it will be the sole holder of the unit.

Payments and Notices

In making payments and giving notices with respect to our units, we will follow the procedures as described in the applicable prospectus supplement.

Table of Contents

PLAN OF DISTRIBUTION

Our Plan of Distribution

We may sell securities:

through underwriters;

through dealers;

through agents;

directly to purchasers;

in at the market offering, within the meaning of Rule 415(a)(4) of the Securities Act; or

through a combination of any of these methods or any other method permitted by law.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders.

We may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. In the prospectus supplement relating to such offering, we will name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we must pay to any such agent. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions:

at a fixed price, or prices, which may be changed from time to time;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

the name of the agent or any underwriters;

the public offering or purchase price;

any discounts and commissions to be allowed or paid to the agent or underwriters;

all other items constituting underwriting compensation;

any discounts and commissions to be allowed or paid to dealers; and

any exchanges on which the securities will be listed.

If any underwriters or agents are used in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement, sales agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

Table of Contents

In connection with the offering of securities, we may grant to the underwriters an option to purchase additional securities with an additional underwriting commission, as may be set forth in any accompanying prospectus supplement. If we grant any such option, the terms of such option will be set forth in the prospectus supplement for such securities.

If a dealer is used in the sale of the securities in respect of which the prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer, who may be deemed to be an underwriter as that term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and

if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Offered securities may also be offered and sold, if so indicated in the prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreement, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters in connection with their remarketing of offered securities.

Certain agents, underwriters and dealers, and their associates and affiliates, may be customers of, have borrowing relationships with, engage in other transactions with, or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may overallocate in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or

Table of Contents

any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

Under Rule 15c6-1 of the Securities Exchange Act of 1934, as amended (the Exchange Act), trades in the secondary market generally are required to settle in three business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than three scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the third business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than three scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

The anticipated date of delivery of offered securities will be set forth in the applicable prospectus supplement relating to each offer.

Table of Contents

LEGAL MATTERS

Certain legal matters in connection with this offering will be passed upon for us by Goodwin Procter LLP, San Francisco, California. Any underwriters, dealers or agents will also be advised about the validity of the securities and other legal matters by their own counsel, which will be named in the prospectus supplement.

Table of Contents

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of an automatic shelf registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC. We are subject to the information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (*www.sec.gov*).

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See Description of Capital Stock. We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any stockholder upon written or oral request and without charge. Written requests for such copies should be directed to Fate Therapeutics, Inc., 3535 General Atomics Court, Suite 200, San Diego, CA 92121, Attention: Secretary, or by telephone request to (858) 875-1800. Our website is located at *www.fatetherapeutics.com*. Information contained on our website is not incorporated by reference into this prospectus and, therefore, is not part of this prospectus or any accompanying prospectus supplement.

Table of Contents

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made after the date of the filing of this registration statement and prior to the effectiveness of this registration statement, except as to any portion of any future report or document that is not deemed filed under such provisions, until we sell all of the securities:

Annual Report on Form 10-K for the year ended December 31, 2017;

The information specifically incorporated by reference into our Annual Report from our definitive proxy statement on Schedule 14A (other than information furnished rather than filed), which was filed with the SEC on March 16, 2018;

The Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 10, 2018, August 6, 2018 and November 1, 2018, respectively;

The Current Reports on Form 8-K filed with the SEC on January 17, 2018, May 4, 2018, May 18, 2018, June 1, 2018, August 1, 2018, September 13, 2018, September 18, 2018, September 21, 2018 and November 7, 2018; and

The description of our common stock contained in our registration statement on Form 8-A (Registration No. 001-36076) filed with the SEC on September 17, 2013 under Section 12(b) of the Exchange Act, including any amendments or reports filed for the purpose of updating such description.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered with the prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address:

Fate Therapeutics, Inc., 3535 General Atomics Court, Suite 200, San Diego, CA 92121, Attention: Secretary, or by telephone request to (858) 875-1800.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this

prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.

Table of Contents

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

PROSPECTUS

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any securities in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.

November 21, 2018

Table of Contents

PROSPECTUS

Up to \$50,000,000

Common Stock

We have entered into a sales agreement, or the Sales Agreement, with Leerink Partners LLC, or Leerink, dated November 21, 2018, relating to shares of our common stock, par value \$0.001 per share, offered by this prospectus. In accordance with the terms of the Sales Agreement, under this prospectus we may offer and sell shares of our common stock having an aggregate offering price of up to \$50,000,000 from time to time through Leerink, acting as our agent.

Our common stock is listed on the Nasdaq Global Market under the symbol FATE. On November 19, 2018, the last reported sale price of our common stock on the Nasdaq Global Market was \$12.29 per share.

Sales of our common stock, if any, under this prospectus may be made in sales deemed to be an at the market offering as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act, including, without limitation, sales made directly on or through the Nasdaq Global Market, on or through any other existing trading market for our common stock or to or through a market maker. Leerink is not required to sell any specific number or dollar amount of shares of our common stock but will act as our sales agent on a best efforts basis and use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with its normal trading and sales practices, on mutually agreed terms between Leerink and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Leerink will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold. In connection with the sale of our common stock on our behalf, Leerink will be deemed to be an underwriter within the meaning of the Securities Act, and the compensation of Leerink will be deemed to be underwriting commissions or discounts.

We are an emerging growth company under applicable Securities and Exchange Commission rules and are subject to reduced public company reporting requirements.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page 4 of this prospectus and the risk factors in the documents incorporated by reference in this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Leerink Partners

The date of this prospectus is November 21, 2018.

Table of Contents

TABLE OF CONTENTS

	Page
<u>ABOUT THIS PROSPECTUS</u>	ii
<u>PROSPECTUS SUMMARY</u>	1
<u>RISK FACTORS</u>	4
<u>CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	6
<u>USE OF PROCEEDS</u>	8
<u>DIVIDEND POLICY</u>	9
<u>DILUTION</u>	10
<u>PLAN OF DISTRIBUTION</u>	12
<u>LEGAL MATTERS</u>	13
<u>EXPERTS</u>	13
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	14
<u>INFORMATION INCORPORATED BY REFERENCE</u>	15

We are responsible for the information contained and incorporated by reference in this prospectus, in any accompanying prospectus supplement, and in any related free writing prospectus we prepare or authorize. We have not, and Leerink has not, authorized anyone to give you any other information, and neither we nor Leerink take any responsibility for any other information that others may give you. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this documentation are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you. The information contained in this document speaks only as of the date of this document, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic registration statement that we have filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. By using a shelf registration statement, we may offer shares of our common stock having an aggregate offering price of up to \$50,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering.

This prospectus describes the terms of this offering of common stock and also adds to and updates information contained in the documents incorporated by reference into this prospectus. To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference into this prospectus that was filed with the SEC before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in this prospectus the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

You should rely only on the information contained in, or incorporated by reference into, this prospectus and in any free writing prospectus that we may authorize for use in connection with this offering. We have not, and Leerink Partners has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and Leerink is not, making an offer to sell or soliciting an offer to buy our securities in any jurisdiction where an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus, the documents incorporated by reference into this prospectus, and in any free writing prospectus that we may authorize for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus, the documents incorporated by reference into this prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision. You should also read and consider the information in the documents to which we have referred you in the sections of this prospectus entitled *Where You Can Find More Information* and *Information Incorporated by Reference*.

We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

When we refer to *Fate*, *we*, *our*, *us* in this prospectus, we mean Fate Therapeutics, Inc. and our subsidiaries, unless otherwise specified. When we refer to *you*, we mean the holders of common stock of Fate.

Table of Contents

PROSPECTUS SUMMARY

*This summary highlights selected information contained elsewhere in, or incorporated by reference into, this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in our common stock, and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus, any free writing prospectus that we have authorized for use in connection with this offering and the documents incorporated by reference in this prospectus. You should read all such documents carefully, and you should pay special attention to the information contained under the caption entitled *Risk Factors* in this prospectus, in our Annual Reports on Form 10-K, in any subsequent Quarterly Reports on Form 10-Q and in our other reports filed from time to time with the SEC, which are incorporated by reference into this prospectus, before deciding to buy shares of our common stock.*

Company Overview

We are a clinical-stage biopharmaceutical company dedicated to the development of programmed cellular immunotherapies for cancer and immune disorders. We are developing first-in-class cell therapy product candidates based on a simple notion: we believe that better cell therapies start with better cells.

To create better cell therapies, we use a therapeutic approach that we generally refer to as cell programming. For certain of our cell therapy product candidates, we use pharmacologic modulators, such as small molecules, to enhance the biological properties and therapeutic function of cells *ex vivo* before our product candidates are administered to a patient. In other cases, we use human induced pluripotent stem cells (iPSCs) to generate a clonal master iPSC line having preferred biological properties and direct the fate of the clonal master iPSC line to create a homogeneous population of our cell therapy product candidate. We believe clonal master iPSC lines may serve as a renewable source for manufacturing cell therapy products which are well-defined and uniform in composition, can be mass produced at significant scale in a cost-effective manner, and can be delivered off-the-shelf to treat many patients. Fate Therapeutics' iPSC product platform is supported by an intellectual property portfolio of over 100 issued patents and 100 pending patent applications.

Utilizing these therapeutic approaches, we program cells of the immune system, including natural killer (NK) cells, T cells and CD34+ cells, and are advancing a pipeline of programmed cellular immunotherapies in the therapeutic areas of immuno-oncology and immuno-regulation.

We have entered into a research collaboration and license agreement with the Regents of the University of Minnesota to develop off-the-shelf NK cell cancer immunotherapies derived from clonal master iPSC lines. Additionally, we have entered into a research collaboration and license agreement with Memorial Sloan Kettering Cancer Center to develop off-the-shelf, engineered T-cell cancer immunotherapies derived from clonal master iPSC lines.

We have also entered into a collaboration and option agreement with Ono Pharmaceutical Co. Ltd. (Ono Collaboration Agreement) for the joint development and commercialization of two off-the-shelf, iPSC-derived chimeric antigen receptor (CAR) T-cell product candidates, and a research collaboration and license agreement with Juno Therapeutics, Inc. to identify and apply small molecule modulators to enhance the therapeutic function of genetically-engineered CAR T-cell and T-cell receptor immunotherapies.

We are also party to an exclusive license agreement with J. David Gladstone Institutes under which we obtained an exclusive license to certain patents and patent applications for the research, development, manufacturing, and commercialization of human therapeutics derived from iPSCs.

Table of Contents

The following table summarizes our programmed cellular immunotherapies currently under development and our cell programming partnerships:

PROGRAM	STAGE OF		
	DEVELOPMENT	THERAPEUTIC AREA	COMMERCIAL RIGHTS
<i>Immuno-Oncology</i>			
FATE-NK100	Phase 1	Relapsed / Refractory AML	Worldwide
FATE-NK100	Phase 1	Recurrent Ovarian Cancer	Worldwide
FATE-NK100	Phase 1	Advanced Solid Tumors	Worldwide
FT500	IND Submitted	Advanced Solid Tumors	Worldwide
FT516	Preclinical	Hematologic / Solid Tumors	Worldwide
FT519	Preclinical	Hematologic Malignancies	Worldwide
FT819	Preclinical	Hematologic Malignancies	Worldwide
FT-ONO1	Research	Hematologic Malignancies	Joint ¹
FT-ONO2	Research	Advanced Solid Tumors	Joint ¹
<i>Immuno-Regulation</i>			
ProTmune	Phase 2	Prevention of Acute GvHD	Worldwide
ToleraCyte	Preclinical	Type 1 Diabetes	Worldwide
FT300	Preclinical	Immune Disorders	Worldwide
<i>Cell Programming Partnership</i>			
Engineered CAR / TCR T Cells ²	Preclinical	Hematologic / Solid Tumors	Juno Therapeutics

1 Subject to the Ono Collaboration Agreement.

2 Collaboration excludes all cell types derived from induced pluripotent stem cells including engineered T cells.

Corporate Information

We were incorporated in Delaware in 2007, and are headquartered in San Diego, CA. Our principal executive office is located at 3535 General Atomics Court, Suite 200, San Diego, CA 92121, and our telephone number is (858) 875-1800. Our website address is www.fatetherapeutics.com. We do not incorporate the information on or accessible through our website into this prospectus, and you should not consider any information on, or that can be accessed through, our website a part of this prospectus.

We own various U.S. federal trademark registrations and applications, and unregistered trademarks, including the following marks referred to in this document: Fate Therapeutics[®], our corporate logo, ProTmune[™] and ToleraCyte[™]. All other trademarks or trade names referred to in this document are the property of their respective owners. Solely for convenience, the trademarks and trade names in this document are referred to without the symbols[®] and [™], but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

On October 4, 2013, we completed our initial public offering. We qualify as an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012, as amended. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. We will cease to be an emerging growth company on the date that is the earliest of: (i) the last day of the

Edgar Filing: FATE THERAPEUTICS INC - Form S-3ASR

fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) December 31, 2018; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

Table of Contents

THE OFFERING

Common Stock Offered by Us

Shares of our common stock having an aggregate offering price of up to \$50,000,000.

Common stock to be outstanding after this offering Up to 68,571,674 shares (as more fully described in the notes following this table), assuming sales of 4,068,348 shares of our common stock in this offering at a sales price of \$12.29 per share, which was the last reported sale price of our common stock on the Nasdaq Global Market on November 19, 2018. The actual number of shares issued will vary depending on the sales price under this offering.

Manner of Offering At the market offering that may be made from time to time through our sales agent, Leerink Partners LLC. See Plan of Distribution.

Use of Proceeds We intend to use the net proceeds from this offering, if any, for working capital and general corporate purposes, including development expenses and general and administrative expenses. See Use of Proceeds.

Risk Factors Investing in our common stock involves a high degree of risk. You should read the Risk Factors section of this prospectus as well as those risk factors that are incorporated by reference in this prospectus for a discussion of factors to consider carefully before deciding to invest in our common stock.

Nasdaq Global Market symbol FATE.

The number of shares of our common stock to be outstanding after this offering is based on 64,503,326 shares of our common stock outstanding as of September 30, 2018, and unless otherwise indicated, excludes, in each case as of that date:

14,097,745 shares of common stock issuable upon the conversion of 2,819,549 shares of our Class A Convertible Preferred Stock;

7,297,339 shares of common stock issuable upon the exercise of stock options outstanding at a weighted-average exercise price of \$5.05 per share;

188,625 shares of common stock issuable upon the vesting and settlement of outstanding restricted stock units, or RSUs, under our equity incentive plans at a weighted-average grant date fair value of \$4.89 per share;

85,094 shares of common stock issuable upon the exercise of warrants outstanding at a weighted-average exercise price of \$5.41 per share;

3,358,285 shares of common stock available for issuance under our Amended and Restated 2013 Stock Option and Incentive Plan, or 2013 Plan, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2013 Plan pursuant to evergreen provisions;

729,000 shares of common stock available for issuance under our 2013 Employee Stock Purchase Plan, or ESPP, as well as any future increases in the number of shares of our common stock reserved for issuance under the ESPP pursuant to evergreen provisions; and

500,000 shares of common stock available for issuance under our Inducement Equity Plan, or Inducement Plan.

Table of Contents

RISK FACTORS

*An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should carefully consider the risks described below and those discussed under the caption entitled **Risk Factors** in our Annual Report on Form 10-K for the year ended December 31, 2017 and any subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus, together with other information in any applicable prospectus supplement, the information and documents incorporated by reference herein and therein, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. See **Cautionary Note Regarding Forward-Looking Statements**.*

Risks Related to this Offering

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses, and these financial losses could have a material adverse effect on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

It is not possible to predict the aggregate proceeds resulting from sales made under the Sales Agreement.

Subject to certain limitations in the Sales Agreement and compliance with applicable law, we have the discretion to deliver a placement notice to Leerink at any time throughout the term of the Sales Agreement. The number of shares that are sold through Leerink after delivering a placement notice will fluctuate based on a number of factors, including the market price of our common stock during the sales period, any limits we may set with Leerink in any applicable placement notice and the demand for our common stock. Because the price per share of each share sold pursuant to the Sales Agreement will fluctuate over time, it is not currently possible to predict the aggregate proceeds to be raised in connection with sales under the Sales Agreement.

The common stock offered hereby may be sold in at the market offerings, and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and accordingly may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices and number of shares sold in this offering. In addition, subject to the final determination by our board of directors or any restrictions we may place in any applicable placement notice, there is no minimum or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

If you purchase our common stock in this offering, you may incur immediate and substantial dilution in the book value of your shares.

Edgar Filing: FATE THERAPEUTICS INC - Form S-3ASR

The offering price per share of common stock in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Therefore, if you purchase common stock in this offering, you may pay a price per share that exceeds our as adjusted net tangible book value per share of common stock. Assuming that an aggregate of 4,068,348 shares of our common stock are sold at an assumed offering price of

Table of Contents

\$12.29 per share, the last reported sale price of our common stock on the Nasdaq Global Market on November 19, 2018, for aggregate gross proceeds of \$50.0 million, and after deducting commissions and estimated offering expenses payable by us, you would experience immediate dilution of \$0.54 per share, representing the difference between our as adjusted net tangible book value per share as of September 30, 2018, immediately after giving effect to this offering, and the assumed offering price. To the extent that any options or warrants are exercised, any RSUs vest and are settled, new equity awards are issued under our equity incentive plans, or we otherwise issue additional shares of common stock in the future (including shares issued in connection with strategic and other transactions), you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders. See the section titled **Dilution** below for a more detailed illustration of the dilution you would incur if you participate in this offering.

If you purchase shares of common stock in this offering, you may also experience future dilution as a result of future equity offerings.

To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by any investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by any investors in this offering.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of our current debt agreement, and any future debt agreements that we may enter into, may preclude us from paying dividends without the lenders' consent or at all. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any applicable prospectus supplement and the documents that we incorporate by reference herein and therein, contain forward-looking statements that involve risks and uncertainties, as well as assumptions that, even if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. All statements other than statements of historical facts contained in this prospectus, any applicable prospectus supplement and the documents that we incorporate by reference herein and therein, are forward-looking statements. In some cases, you can identify forward-looking statements by words such as anticipate, believe, contemplate, continue, could, estimate, expect, intend, may, plan, potential, predict, project, seek, should, target, will, would, or the negative or comparable terminology. These forward-looking statements include, but are not limited to, statements about:

the initiation, timing, progress and results of our ongoing and planned clinical trials, preclinical studies, and research and development programs;

our ability to advance our product candidates into clinical development, including under the IND application for our FT500 product candidate, and to successfully conduct and complete clinical trials;

the timing and likelihood of, and our ability to obtain and maintain regulatory approval of our product candidates;

the potential benefits of strategic collaboration agreements and our ability, and the ability of our collaborators, to successfully develop product candidates under the respective collaborations, including the recent collaboration agreement entered into with Ono;

our ability to enroll patients in our ongoing and planned clinical trials in a timely manner;

the performance of third parties in connection with the development and manufacture of our product candidates, including third parties conducting our clinical trials as well as third-party suppliers and manufacturers;

our ability to manufacture our product candidates for clinical development and, if approved, for commercialization, and the timing and costs of such manufacture;

our ability to develop sales and marketing capabilities, whether alone or with actual or potential collaborators, to commercialize our product candidates, if approved;

our ability to successfully commercialize our product candidates, if approved;

the size and growth of the potential markets for our product candidates and our ability to serve those markets;

regulatory developments and approval pathways in the United States and foreign countries for our product candidates;

the potential scope and value of our intellectual property rights;

our ability, and the ability of our licensors, to obtain, maintain, defend and enforce intellectual property rights protecting our product candidates, and our ability to develop and commercialize our product candidates without infringing the proprietary rights of third parties;

our ability to retain and recruit key personnel;

our ability to obtain funding for our operations;

the implementation of our business model, strategic plans for our business, product candidates and technology;

Table of Contents

the accuracy of our estimates regarding our expenses, ongoing losses, capital requirements and revenues;

developments relating to our competitors and our industry; and

other risks and uncertainties, including those described or incorporated by reference under the caption "Risk Factors" in this prospectus.

Any forward-looking statements in this prospectus, any applicable prospectus supplement and the documents that we incorporate by reference herein and therein, reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those referenced in the section "Risk Factors" and elsewhere in this prospectus and the documents that we incorporate by reference. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This prospectus, any applicable prospectus supplement and the documents that we incorporate by reference herein and therein, contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

Table of Contents

USE OF PROCEEDS

We may issue and sell shares of our common stock having an aggregate offering price of up to \$50,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions to Leerink and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will sell any shares under the Sales Agreement as a source of financing.

We intend to use the net proceeds from this offering, if any, for working capital and general corporate purposes, including development expenses and general and administrative expenses.

The amounts and timing of our use of the net proceeds from the sale of securities in this offering will depend on a number of factors, such as the timing and progress of our and our strategic partners' clinical trials of our product candidates and our development efforts, the timing and progress of any partnering efforts, technological advances and the competitive environment for our product candidates. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

Table of Contents

DIVIDEND POLICY

We have never declared or paid any dividends on our capital or common stock. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay dividends will be made at the discretion of our board of directors.

Table of Contents**DILUTION**

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering.

We calculate net tangible book value per share of our common stock by dividing the net tangible book value, which is tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the amount per share paid by purchasers of shares of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering. Our historical net tangible book value as of September 30, 2018 was approximately \$173.9 million, or \$2.70 per share of our common stock.

Immediately after giving effect to the assumed sale by us of shares of our common stock pursuant to this prospectus in the aggregate amount of \$50.0 million at an assumed public offering price of \$12.29 per share, which was the last reported sale price of our common stock on the Nasdaq Global Market on November 19, 2018, and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2018 would have been \$222.2 million, or \$3.24 per share of our common stock. This represents an immediate increase in the as adjusted net tangible book value of \$0.54 per share to our existing stockholders and an immediate dilution in as adjusted net tangible book value of \$9.05 per share to new investors participating in this offering. Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by new investors. The following table illustrates this dilution on a per-share basis:

Assumed public offering price per share	\$ 12.29
Historical net tangible book value per share as of September 30, 2018	\$ 2.70
Increase per share attributable to new investors	\$ 0.54
As adjusted net tangible book value per share as of September 30, 2018, immediately after giving effect to this offering	\$ 3.24
Dilution per share to new investors purchasing shares in this offering	\$ 9.05

The table above assumes for illustrative purposes that an aggregate of 4,068,348 shares of our common stock are sold pursuant to this prospectus at a public offering price of \$12.29 per share, which was the last reported sale price of our common stock on the Nasdaq Global Market on November 19, 2018, for aggregate gross proceeds of \$50.0 million. The shares of our common stock sold in this offering, if any, will be sold from time to time at various prices. The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this prospectus.

An increase of \$0.50 per share in the price at which the shares are sold from the assumed public offering price of \$12.29 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$50.0 million is sold at that price, would result in an as adjusted net tangible book value per share after the offering of \$3.25 per share and would increase the dilution in net tangible book value per share to new investors in this offering to \$9.54 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of

Edgar Filing: FATE THERAPEUTICS INC - Form S-3ASR

\$0.50 per share in the price at which the shares are sold from the assumed public offering price of \$12.29 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$50.0 million is sold at that price, would result in an as adjusted net tangible book value per share after the offering of \$3.23 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$8.56 per share, after deducting commissions and estimated aggregate offering expenses payable by us.

Table of Contents

The above discussion and table are based on 64,503,326 shares of our common stock issued and outstanding as of September 30, 2018 and excludes the following:

14,097,745 shares of common stock issuable upon the conversion of 2,819,549 shares of our Class A Convertible Preferred Stock;

7,297,339 shares of common stock issuable upon the exercise of stock options outstanding at a weighted-average exercise price of \$5.05 per share;

188,625 shares of common stock issuable upon the vesting and settlement of outstanding RSUs under our equity incentive plans at a weighted-average grant date fair value of \$4.89 per share;

85,094 shares of common stock issuable upon the exercise of warrants outstanding at a weighted-average exercise price of \$5.41 per share;

3,358,285 shares of common stock available for issuance under our 2013 Plan, as well as any future increases in the number of shares of our common stock reserved for issuance under the 2013 Plan pursuant to evergreen provisions;

729,000 shares of common stock available for issuance under our ESPP, as well as any future increases in the number of shares of our common stock reserved for issuance under the ESPP pursuant to evergreen provisions; and

500,000 shares of common stock available for issuance under our Inducement Plan.

Table of Contents

PLAN OF DISTRIBUTION

We have entered into the Sales Agreement with Leerink, under which we may issue and sell shares of our common stock having an aggregate gross sales price of up to \$50,000,000 from time to time through Leerink acting as agent. The Sales Agreement has been filed as an exhibit to our registration statement on Form S-3 of which this prospectus forms a part.

Upon delivery of a placement notice and subject to the terms and conditions of the Sales Agreement, Leerink may sell our common stock by any method permitted by law deemed to be an at the market offering as defined in Rule 415 of the Securities Act, including sales made directly on the Nasdaq Global Market, on any other existing trading market for our common stock, or to or through a market maker. We may instruct Leerink not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or Leerink may suspend the offering of common stock upon notice and subject to other conditions.

We will pay Leerink commissions, in cash, for its services in acting as agent in the sale of our common stock. Leerink will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price per share sold. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We have also agreed to reimburse Leerink for certain specified expenses, including the fees and disbursements of its legal counsel, in an amount not to exceed \$50,000, plus an additional amount of up to \$15,000 in connection with any filings made with the Financial Industry Regulatory Authority, Inc., or FINRA. In accordance with FINRA Rule 5110, these reimbursed fees and expenses are deemed sales compensation to Leerink in connection with this offering. We estimate that the total expenses for the offering, excluding discounts and commissions payable to Leerink under the terms of the Sales Agreement, will be approximately \$0.3 million.

Leerink will provide written confirmation to us no later than the opening of the trading day on the Nasdaq Global Market after each trading day on which common stock is sold through it as sales agent under the Sales Agreement. Each confirmation will include the number or amount of shares sold through it as sales agent on that day, the volume-weighted average price of the shares sold and the net proceeds to us from such sales.

Settlement for sales of common stock will occur on the second trading day following the date on which any sales are made, or on some other date that is agreed upon by us and Leerink in connection with a particular transaction, in return for payment of the net proceeds to us. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Leerink may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Leerink will use its commercially reasonable efforts, consistent with its sales and trading practices, to solicit offers to purchase the common stock shares under the terms and subject to the conditions set forth in the Sales Agreement. In connection with the sale of the common stock on our behalf, Leerink will be deemed to be an underwriter within the meaning of the Securities Act and the compensation of Leerink will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to Leerink against certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the Sales Agreement will terminate upon the termination of the Sales Agreement as permitted therein. We and Leerink may each terminate the Sales Agreement at any time upon ten days prior notice.

Leerink and/or its affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, Leerink will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus.

This prospectus in electronic format may be made available on a website maintained by Leerink and Leerink may distribute this prospectus electronically.

Table of Contents

LEGAL MATTERS

The validity of the common stock being offered by this prospectus will be passed upon by Goodwin Procter LLP, San Francisco, California. Perkins Coie LLP is counsel to Leerink in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of the registration statement on Form S-3ASR we filed with the SEC under the Securities Act and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference in this prospectus for a copy of such contract, agreement or other document. Because we are subject to the information and reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Our website is located at www.fatetherapeutics.com. Information contained on our website is not incorporated by reference into this prospectus and, therefore, is not part of this prospectus.

Table of Contents

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded.

This prospectus incorporates by reference the documents listed below (File No. 001-36076) and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

Annual Report on Form 10-K for the fiscal year ended December 31, 2017, including the information specifically incorporated by reference into the Annual Report on Form 10-K from our Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 16, 2018, as amended and supplemented by the Definitive Additional Materials on Schedule 14A that we filed with the SEC on March 16, 2018;

Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, filed with the SEC on May 10, 2018, August 6, 2018 and November 1, 2018, respectively;

Current Reports on Form 8-K filed with the SEC on January 17, 2018, May 4, 2018, May 18, 2018, June 1, 2018, August 1, 2018, September 13, 2018, September 18, 2018, September 21, 2018 and November 7, 2018; and

The description of our common stock which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A, filed with the SEC on September 17, 2013, including any amendments or reports filed for the purpose of updating such description.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered with the prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address:

Fate Therapeutics, Inc., 3535 General Atomics Court, Suite 200, San Diego, CA 92121, Attention: Secretary, or by telephone request to (858) 875-1800.

In accordance with Rule 412 of the Securities Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

Table of Contents

Up to \$50,000,000

Common Stock

PROSPECTUS

Leerink Partners

November 21, 2018

Table of Contents**Part II INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution**

The expenses payable by Fate Therapeutics, Inc. (the Registrant or the Company) in connection with the issuance and distribution of the securities being registered (other than underwriting discounts and commissions, if any) are set forth below. Each item listed is estimated, except for the Securities and Exchange Commission (the SEC) registration fee.

Securities and Exchange Commission registration fee(1)	\$ 6,060	
Legal fees and expenses		*
Accounting fees and expenses		*
Printing fees and expenses		*
Transfer agent and trustee fees		*
Miscellaneous		*
Total		*

(1) Represents registration fee applicable to amount included in prospectus for \$50.0 million in shares of common stock. Additional registration fees deferred in reliance upon Rules 456(b) and 457(r) under the Securities Act.

* Estimated expenses not presently known.

Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law, or the DGCL, authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

Our amended and restated certificate of incorporation and bylaws contain provisions that limit or eliminate the personal liability of our directors and officers to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director or officer will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

any breach of the director's duty of loyalty to us or our stockholders;

any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions;
or

any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

II-1

Table of Contents

In addition, our bylaws provide that:

we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and

we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and certain of our executive officers. These agreements provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates, to the fullest extent permitted by the DGCL. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and executive officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us and/or in furtherance of our rights. We intend to enter into indemnification agreements with any new directors and executive officers in the future.

Additionally, certain of our directors may have certain rights to indemnification, advancement of expenses or insurance provided by their affiliates, which indemnification relates to and might apply to the same proceedings arising out of such director's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors are primary and any obligation of the affiliates of those directors to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain a general liability insurance policy which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act.

Item 16. Exhibits**Exhibit**

No.	Description
1.1*	Form of Underwriting Agreement
1.2	<u>Sales Agreement dated as of November 21, 2018 by and between the registrant and Leerink Partners LLC</u>
3.1	<u>Amended and Restated Certificate of Incorporation (filed as Exhibit 3.2 to the registrant's Registration Statement on Form S-1/A (File No. 333-190608) filed with the SEC on August 29, 2013 and incorporated herein by reference)</u>
3.2	<u>Certificate of Designation of Preferences, Rights and Limitations of Class A Convertible Preferred Stock (filed as Exhibit 3.1 to the registrant's Current Report on Form 8-K dated November 22, 2016 and filed on November 28, 2016 and incorporated herein by reference)</u>

- 3.3 Amended and Restated Bylaws (filed as Exhibit 3.4 to the registrant's Registration Statement on Form S-1/A (File No. 333-190608) filed with the SEC on August 29, 2013 and incorporated herein by reference)
- 4.1 Stock Purchase Agreement between the registrant and Juno Therapeutics, Inc., dated as of May 4, 2015 (filed as Exhibit 4.2 to the registrant's Quarterly Report on Form 10-Q (File No. 001-36076) filed with the SEC on August 5, 2015 and incorporated herein by reference)
- 4.2 Amended and Restated Investor Rights Agreement between the registrant and certain of its stockholders, dated as of August 8, 2013 (filed as Exhibit 10.19 to the registrant's Registration Statement on Form S-1 (File No. 333-190608) filed with the SEC on August 13, 2013 and incorporated herein by reference)

Table of Contents**Exhibit**

No.	Description
4.3	<u>Amendment to Amended and Restated Investor Rights Agreement between the registrant and certain of its stockholders, dated as of May 4, 2015 (filed as Exhibit 10.2 to the registrant's Quarterly Report on Form 10-Q (File No. 001-36076) filed with the SEC on August 5, 2015 and incorporated herein by reference)</u>
4.4	<u>Form of indenture for senior debt securities and the related form of senior debt security (filed as Exhibit 4.4 to the registrant's Registration Statement on Form S-3 (File No. 333-219987) with the SEC on August 15, 2017 and incorporated herein by reference)</u>
4.5	<u>Form of indenture for subordinated debt securities and the related form of subordinated debt security (filed as Exhibit 4.5 to the registrant's Registration Statement on Form S-3 (File No. 333-219987) with the SEC on August 15, 2017 and incorporated herein by reference)</u>
4.6	<u>Specimen Common Stock Certificate (filed as Exhibit 4.1 to the registrant's Registration Statement on Form S-1/A (File No. 333-190608) filed with the SEC on August 29, 2013 and incorporated herein by reference)</u>
4.7*	Form of Certificate of Designations
4.8*	Form of Warrant Agreements
4.9*	Form of Unit Certificate
4.10*	Form of Preferred Stock Certificate
5.1	<u>Opinion of Goodwin Procter LLP</u>
5.2	<u>Opinion of Goodwin Procter LLP relating to the sales agreement prospectus</u>
23.1	<u>Consent of Independent Registered Public Accounting Firm</u>
23.2	<u>Consent of Goodwin Procter LLP (included in Exhibit 5.1 hereto)</u>
23.3	<u>Consent of Goodwin Procter LLP (included in Exhibit 5.2 hereto)</u>
24.1	<u>Power of Attorney (included on the signature pages to this registration statement)</u>
25.1**	Form T-1 Statement of Eligibility of Trustee for Senior Indenture under the Trust Indenture Act of 1939
25.2**	Form T-1 Statement of Eligibility of Trustee for Subordinated Indenture under the Trust Indenture Act of 1939

* To be filed by amendment or as an exhibit to a document to be incorporated or deemed to be incorporated by reference in this registration statement, including a Current Report on Form 8-K.

** To be filed pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(a)(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any

Table of Contents

increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement; *provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the

II-4

Table of Contents

underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser;
- (6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;
- (7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue; and
- (8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act of 1939 in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)(2) of the Trust Indenture Act of 1939.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in City of San Diego, State of California, on November 21, 2018.

FATE THERAPEUTICS, INC.

By: /s/ J. Scott Wolchko

J. Scott Wolchko

President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby severally constitutes and appoints each of J. Scott Wolchko and Cindy R. Tahl, and each of them singly, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including, without limitation, post-effective amendments) to this registration statement (or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Table of Contents

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ J. Scott Wolchko J. Scott Wolchko	President, Chief Executive Officer and Director (Principal Executive Officer, Financial Officer and Principal Accounting Officer)	November 21, 2018
/s/ William H. Rastetter William H. Rastetter, Ph.D.	Chairman of the Board and Director	November 21, 2018
/s/ John D. Mendlein John D. Mendlein, Ph.D., J.D.	Vice Chairman of the Board and Director	November 21, 2018
/s/ Timothy P. Coughlin Timothy P. Coughlin	Director	November 21, 2018
/s/ Robert S. Epstein Robert S. Epstein, M.D., M.S.	Director	November 21, 2018
/s/ Amir Nashat Amir Nashat, Sc.D.	Director	November 21, 2018
/s/ Michael Lee Michael Lee	Director	November 21, 2018