

\$350,000,000



Fate Therapeutics, Inc.

Common Stock

Pre-Funded Warrants to Purchase Common Stock

This free writing prospectus relates only to the offering described below and should be read together with the preliminary prospectus supplement dated January 4, 2021 (the Preliminary Prospectus Supplement) and the accompanying base prospectus, in each case, including the documents incorporated by reference therein. This free writing prospectus supplements the Preliminary Prospectus Supplement primarily to reflect the addition of certain pre-funded warrants, and the shares of common stock issuable upon the exercise of such pre-funded warrants, to the securities being offered by Fate Therapeutics, Inc. Except as otherwise indicated, all information in this free writing prospectus and the Preliminary Prospectus Supplement assumes no exercise by the underwriters of their option to purchase additional shares of our common stock and no exercise of the pre-funded warrants included in this offering.

This free writing prospectus is qualified in its entirety by reference to the Preliminary Prospectus Supplement and the accompanying base prospectus, in each case, including the documents incorporated by reference therein. Financial information and other information presented in the Preliminary Prospectus Supplement or incorporated by reference therein is deemed to have changed to the extent affected by the changes described herein. This free writing prospectus should be read together with the Preliminary Prospectus Supplement and the accompanying base prospectus, in each case, including the documents incorporated by reference therein, before making a decision in connection with an investment in the securities. Capitalized terms used in this free writing prospectus but not defined have the meanings given to them in the Preliminary Prospectus Supplement.

Entities affiliated with Redmile, which are existing stockholders, have indicated an interest in purchasing a portion of the securities in this offering at the public offering price. However, indications of interest are not binding agreements or commitments to purchase and Redmile may determine to not purchase any securities in this offering. In addition, the underwriters could determine to sell fewer securities to Redmile than Redmile indicates an interest in purchasing or could determine not to sell any securities to Redmile. Michael Lee, one of our directors, is an affiliate of Redmile. The underwriters will receive the same underwriting discount on any securities purchased by Redmile as they will on any other securities sold to the public in this offering.

Issuer	Fate Therapeutics, Inc.
Common stock offered by us	Up to \$350,000,000 of shares
Pre-funded warrants offered by us	<p>We are also offering, in lieu of common stock to certain investors, pre-funded warrants to purchase _____ shares of our common stock. The purchase price of each pre-funded warrant equals the price per share at which the shares of our common stock are being sold to the public in this offering, minus \$0.001, which is the exercise price per share of each pre-funded warrant. Each pre-funded warrant will be exercisable at any time after the date of issuance of such pre-funded warrant, subject to an ownership limitation. See “Description of Pre-Funded Warrants.” This free writing prospectus and the Preliminary Prospectus Supplement also relate to the offering of the shares of our common stock issuable upon exercise of the pre-funded warrants.</p> <p>The lock-up restrictions described in the Preliminary Prospectus Supplement under “Underwriting” will not apply to the issuance of common stock upon the exercise of the pre-funded warrants during the 60-day period following the date of the final prospectus supplement to be filed in connection with this offering.</p>
Option to purchase additional shares	We have granted the underwriters a 30-day option to purchase up to an additional \$52,500,000 of shares of common stock at the public offering price, less the underwriting discounts and commissions. The dollar amount of shares subject to the underwriters’ option equals 15% of the total dollar amount of shares of common stock we are offering plus the shares of common stock underlying the pre-funded warrants.
Dilution	<p>After giving effect to the sale of shares of common stock and pre-funded warrants to purchase shares of our common stock in this offering at the public offering price of \$ _____ per share of our common stock and \$ _____ per pre-funded warrant (which equals the public offering price per share of common stock less the \$0.001 per share exercise price of each such pre-funded warrant) (and excluding shares of common stock issued and any proceeds received upon exercise of the pre-funded warrants or any resulting accounting associated with the pre-funded warrants), and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2020 would have been approximately \$ _____ million, or approximately \$ _____ per share of common stock. This represents an immediate increase in as adjusted net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution of \$ _____ per share to investors participating in this offering at the public offering price.</p>
Listing	Shares of our common stock are listed on The Nasdaq Global Market (Nasdaq), under the symbol “FATE.” We do not intend to list the pre-funded warrants on Nasdaq, any other nationally recognized securities exchange or any other nationally recognized trading system.

RISK FACTORS

There is no public market for the pre-funded warrants being offered in this offering.

There is no public trading market for the pre-funded warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the pre-funded warrants on any securities exchange or nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the pre-funded warrants will be limited.

We may not receive any additional funds upon the exercise of the pre-funded warrants.

Each pre-funded warrant may be exercised by way of a cashless exercise, meaning that the holder may not pay a cash purchase price upon exercise, but instead would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrant. Accordingly, we may not receive any additional funds upon the exercise of the pre-funded warrants.

Holders of any pre-funded warrants purchased in this offering will have no rights as holders of our common stock with respect to the shares of common stock underlying such pre-funded warrants until such holders exercise their pre-funded warrants and acquire our common stock.

Until holders of pre-funded warrants acquire shares of our common stock upon exercise of the pre-funded warrants, holders of pre-funded warrants will have no rights with respect to the shares of our common stock underlying such pre-funded warrants including with respect to dividends and voting rights. Upon exercise of the pre-funded warrants, the holders will be entitled to exercise the rights of a holder of our common stock with respect to the shares of common stock underlying such pre-funded warrants only as to matters for which the record date occurs after the exercise date.

Significant holders or beneficial holders of our common stock may not be permitted to exercise pre-funded warrants that they hold.

A holder of a pre-funded warrant will not be entitled to exercise any portion of any pre-funded warrant which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. Such percentage may be increased by the holder of the pre-funded warrant to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us. As a result, you may not be able to exercise your pre-funded warrants for shares of our common stock at a time when it would be financially beneficial for you to do so. In such circumstance you could seek to sell your pre-funded warrants to realize value, but you may be unable to do so in the absence of an established trading market for the pre-funded warrants.

If you purchase our securities in this offering, you will incur immediate and substantial dilution.

If you purchase our securities in this offering, you will incur immediate and substantial dilution. You will experience further dilution if we issue additional equity securities in the future.

Since the price per share of our common stock and the price per pre-funded warrant being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution with respect to the securities you purchase in this offering. Our net tangible book value as of September 30, 2020 was approximately \$424.4 million, or \$4.88 per share of our common stock, based on 87,004,686 shares of common stock outstanding on September 30, 2020.

Based on the public offering price of \$ _____ per share of our common stock and \$ _____ per pre-funded warrant (which equals the public offering price per share of common stock less the \$0.001 per share exercise price of each such pre-funded warrant) (and excluding shares of common stock issued and any proceeds received upon exercise of the pre-funded warrants or any resulting accounting associated with the pre-funded warrants), and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2020, would have been approximately \$ _____ million, or approximately \$ _____ per share of our common stock. As a result, investors purchasing securities in this offering will incur immediate dilution of \$ _____ per share. See “Dilution” in the Preliminary Prospectus Supplement for a more detailed discussion of the dilution you will incur if you purchase securities in this offering.

In addition, we have a significant number of stock options, RSUs, and shares of preferred stock outstanding. To the extent that outstanding stock options, RSUs, or shares of preferred stock have been or may be exercised, settled or converted or other shares issued, investors purchasing our common stock in this offering may experience further dilution. See “*Risks Related to This Offering and Our Common Stock—Sales of a substantial number of shares of our common stock in the public market could cause our stock price to fall*” in the Preliminary Prospectus Supplement. 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 or result in downward pressure on the price of our common stock.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$ _____ million (or approximately \$ _____ million if the underwriters exercise their option to purchase additional shares in full). We will receive nominal proceeds, if any, upon exercise of the pre-funded warrants.

We currently intend to use the net proceeds from this offering, if any, for funding clinical trials and nonclinical studies of our product candidates, the manufacture of clinical product candidates, the expansion of our cGMP compliant manufacturing operations including the construction, commissioning and qualification of our new facility, the conduct of preclinical research and development, and for general corporate purposes. The expected use of the net proceeds from this offering, if any, represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures depend on numerous factors, including the progress of our nonclinical development efforts, the ongoing status of and results from our clinical trials and other studies and any unforeseen cash needs. As a result, our management will have broad discretion in applying the net proceeds from this offering, if any. Pending the use of the net proceeds from this offering, if any, we may invest these proceeds in short-term, interest-bearing instruments.

DESCRIPTION OF PRE-FUNDED WARRANTS

The following is a brief summary of certain terms and conditions of the pre-funded warrants being offered by us. The following description is subject in all respects to the provisions contained in the pre-funded warrants.

Form

The pre-funded warrants will be issued as individual warrant agreements to each individual purchaser of a pre-funded warrant. The form of pre-funded warrant will be filed as an exhibit to a Current Report on Form 8-K that we will file with the Securities and Exchange Commission (the SEC).

Term

The pre-funded warrants do not expire.

Exercisability

The pre-funded warrants are exercisable at any time after their original issuance. The pre-funded warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice and by payment in full of the exercise price in immediately available funds for the number of shares of our common stock purchased upon such exercise. As an alternative to payment of the exercise price in immediately available funds, the holder may elect to exercise the pre-funded warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of our common stock determined according to the formula set forth in the pre-funded warrants. No fractional shares of our common stock will be issued in connection with the exercise of a pre-funded warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the last closing trading price of our common stock on the exercise date.

Exercise Limitations

Under the pre-funded warrants, we may not effect the exercise of any pre-funded warrant, and a holder will not be entitled to exercise any portion of any pre-funded warrant, which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of our common stock beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, or (ii) the combined voting power of our securities beneficially owned by the holder (together with its affiliates) to exceed 9.99% of the combined voting power of all of our securities then outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the pre-funded warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 19.99% upon at least 61 days' prior notice from the holder to us.

Exercise Price

The exercise price per whole share of our common stock purchasable upon the exercise of the pre-funded warrants is \$0.001 per share of our common stock. The exercise price of the pre-funded warrants and the number of shares of our common stock issuable upon exercise of the pre-funded warrants are subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders. The exercise price will not be adjusted below the par value of our common stock.

Transferability

Subject to applicable laws, the pre-funded warrants may be offered for sale, sold, transferred or assigned without our consent. The pre-funded warrants will be held in definitive form by the warrant agent. The ownership of the pre-funded warrants and any transfers of the pre-funded warrants will be registered in a warrant register maintained by the warrant agent. We will initially act as warrant agent.

Exchange Listing

We do not plan to apply to list the pre-funded warrants on Nasdaq, any other national securities exchange or any other nationally recognized trading system.

Fundamental Transactions

In the event of a fundamental transaction, as described in the pre-funded warrants and generally including any merger or consolidation with or into another person, the sale, transfer or other disposition of all or substantially all of our assets, the acquisition of, or any person or group becoming the beneficial owner of, more than 50% of the voting power represented by our outstanding common stock, or the reorganization, recapitalization or reclassification of our common stock upon consummation of such a fundamental transaction, the holders of the pre-funded warrants will be entitled to receive upon exercise of the pre-funded warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the pre-funded warrants immediately prior to such fundamental transaction without regard to any limitations on exercise contained in the pre-funded warrants.

No Rights as a Stockholder

Except by virtue of such holder's ownership of shares of our common stock, the holder of a pre-funded warrant does not have the rights or privileges of a holder of our common stock, including any voting rights or the rights to receive dividends, until the holder exercises the pre-funded warrant.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

Although it is not entirely free from doubt, a pre-funded warrant should be treated as a share of our common stock for U.S. federal income tax purposes and a holder of a pre-funded warrant should generally be taxed in the same manner as a holder of common stock. Accordingly, no gain or loss should be recognized upon the exercise of a pre-funded warrant and, upon exercise, the holding period of a pre-funded warrant should carry over to the share of common stock received. Similarly, the tax basis of a pre-funded warrant should carry over to the share of common stock received upon exercise, increased by the exercise price (if applicable). Each holder of pre-funded warrants should consult his, her or its own tax advisor regarding the risks associated with the acquisition of pre-funded warrants pursuant to this offering (including potential alternative characterizations).

UNDERWRITING

The underwriters will purchase the pre-funded warrants pursuant to the underwriting agreement described in the Preliminary Prospectus Supplement on terms generally consistent with those applicable to the shares of common stock being sold in the offering. The underwriting discounts and commissions per pre-funded warrant will be equal to the underwriting discounts and commissions per share of common stock sold in the offering.

GENERAL

Additional conforming changes are hereby made to the Preliminary Prospectus Supplement to reflect the changes described in this free writing prospectus. All terms of the Preliminary Prospectus Supplement applicable to our common stock will be applicable to the shares underlying the pre-funded warrants upon issuance.

Fate Therapeutics, Inc. has filed a registration statement (including a preliminary prospectus supplement dated January 4, 2021 and the accompanying base prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the preliminary prospectus supplement and the accompanying base prospectus and other documents the Issuer has filed with the SEC for more complete information about the Issuer and the offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, copies may be obtained from: Jefferies LLC, Attention: Equity Syndicate Prospectus Department, 520 Madison Avenue, 2nd Floor, New York, NY 10022, by e-mail at prospectus_department@jefferies.com or by telephone at (877) 547-6340; BofA Securities, NC1-004-03-43, 200 North College Street, 3rd floor, Charlotte, NC 28255-0001, Attention: Prospectus Department, or by email at dg.prospectus_requests@bofa.com; SVB Leerink LLC, Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, MA 02110, by telephone at (800) 808-7525 ext. 6132 or by email at syndicate@svbleerink.com; or Barclays Capital Inc., c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, NY 11717, by telephone at (888) 603-5847 or by email at Barclaysprospectus@broadridge.com.