



This free writing prospectus relates only to the initial public offering of common stock of Fate Therapeutics, Inc. (the “**Company**”) and should be read together with the preliminary prospectus dated September 16, 2013 relating to this offering (the “**Preliminary Prospectus**”), included in Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-190608) relating to these securities. On September 30, 2013, the Company filed Amendment No. 4 to the Registration Statement, which can be accessed through the following link:

<http://www.sec.gov/Archives/edgar/data/1434316/000119312513383888/0001193125-13-383888-index.htm>.

The following information supplements and updates the information contained in the Preliminary Prospectus.

Common stock offered by us: 6,666,667 shares

Common stock to be outstanding after this offering: 19,051,428 shares

Underwriters’ option to purchase additional shares: 1,000,000 shares

Initial public offering price range: We expect the initial public offering price will be between \$6.00 and \$8.00 per share.

Potential purchases by existing stockholders: Certain holders of five percent or more of our voting securities and stockholders who are affiliated with certain of our directors have indicated an interest in purchasing up to an aggregate of approximately \$15.0 million in shares of our common stock in this offering at the initial public offering price as follows:

Beneficial Owner	Indication of Interest to Purchase Shares in Offering	Shares to be Purchased in Offering⁽¹⁾	Percentage of Common Stock Beneficially Owned After Offering
ARCH Venture Fund VI, L.P.	\$5,000,000	714,285	12.3%
Entities affiliated with Polaris Venture Partners	\$5,000,000	714,285	12.3%
Entities affiliated with Venrock	\$5,000,000	714,285	12.3%

(1) Assuming an initial public offering price of \$7.00 per share, which is the midpoint of the price range set forth above.

If these existing stockholders were to purchase all of these shares, our executive officers, directors and entities affiliated with our five percent stockholders would beneficially own approximately 62% of our outstanding common stock after this offering.

The calculations of the percentages discussed above and in the table are based on 19,059,288 shares of common stock outstanding after this offering, assuming no exercise of the underwriters' option to purchase additional shares, and based on shares of common stock deemed outstanding as of August 15, 2013.

However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering. The underwriting discount for any shares sold to these potential investors in the offering will be the same as the underwriting discount for the shares sold to the public.

Use of Proceeds:

We estimate that the net proceeds to us from the sale of 6,666,667 shares of common stock in this offering will be approximately \$40.5 million based upon an assumed initial public offering price of \$7.00 per share, the midpoint of the price range set forth above, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters' option to purchase additional shares in this offering is exercised in full, we estimate that our net proceeds will be approximately \$47.0 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We currently expect to use the net proceeds from this offering as follows:

- approximately \$20.0 million to fund research and development activities to advance our HSC modulation platform and the clinical and preclinical development of its product candidates, including the conduct of our Phase 2 clinical trial of ProHema in patients with orphan hematologic malignancies;
- approximately \$12.0 million to fund research and development activities to advance our SSC modulation platform and the preclinical development of its product candidates, including the conduct of preclinical studies of our Wnt7a analog product candidates; and
- the remainder for working capital and general corporate purposes, including funding the costs of operating as a public company.

The expected use of net proceeds from this offering 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 may vary significantly depending on numerous factors, including the progress of our development, the status of and results from clinical trials and preclinical studies, as well as any collaborations that we may enter into with third parties for our product candidates, the amount of cash available from other sources and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Capitalization:

Assuming an initial public offering price of \$7.00 per share, which is the midpoint of the price range set forth above, as of June 30, 2013, on a pro forma as adjusted basis, cash and cash equivalents would have been approximately \$64.9 million, additional paid-in capital would have been approximately \$136.0 million, total stockholders' equity (deficit) would have been approximately \$61.0 million, and total capitalization would have been approximately \$63.7 million.

The pro forma as adjusted capitalization information above assumes (i) the issuance of 3,394,138 shares of common stock upon the conversion of an aggregate of \$23.7 million in principal and accrued interest on our 2013 Notes upon the completion of

this offering at the assumed initial public offering price of \$7.00 per share, (ii) that the offering is completed on October 4, 2013 and (iii) our repayment in cash of approximately \$0.1 million in principal and accrued interest under our 2013 Notes issued in August 2013 in lieu of the issuance of 8,351 shares of common stock upon the conversion of such notes which, if issued, would cause the holders of such notes, together with their affiliates and related parties, to beneficially own 15% or more of our outstanding common stock following the completion of this offering.

The number of shares to be issued upon the automatic conversion of our 2013 Notes upon the completion of this offering depends in part on the initial public offering price of our common stock and the date on which this offering is completed. In addition, the number of shares of common stock to be issued upon the conversion of our convertible promissory notes issued in August 2013 immediately following the completion of this offering cannot cause the holders of these notes to beneficially own 15% or more of our outstanding common stock. As a result, the actual number of shares of common stock issued upon such conversion may differ from the number of shares set forth above. A \$1.00 increase in the assumed initial public offering price of \$7.00 per share would decrease by 416,965 shares the aggregate number of shares of our common stock issuable upon the automatic conversion of the outstanding principal and accrued interest on our 2013 Notes and decrease by approximately \$0.1 million the principal and accrued interest under such notes that we would be required to repay on or before the date 30 days after the completion of this offering. A \$1.00 decrease in the assumed initial public offering price of \$7.00 per share would increase by 105,182 shares the aggregate number of shares of our common stock issuable upon the automatic conversion of the outstanding principal and accrued interest on our 2013 Notes and increase by approximately \$2.7 million the principal and accrued interest under such notes that we would be required to repay in lieu of the issuance of 470,251 shares of common stock, which, if issued, would cause the holders of such notes and their affiliates and related parties to beneficially own 15% or more of our outstanding common stock, on or before the date 30 days after the completion of this offering.

Dilution:

After giving effect to the pro forma transactions described in the Preliminary Prospectus, our sale of 6,666,667 shares of our common stock in this offering at the assumed initial offering price of \$7.00 per share, which is the midpoint of the price range set forth above, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of June 30, 2013 would have been approximately \$61.0 million, or approximately \$3.20 per share of our common stock. This represents an immediate increase of net tangible book value of \$1.54 per share to our existing stockholders and an immediate dilution in net tangible book value of \$3.80 per share to purchasers of common stock in this offering. If the underwriters exercise their option to purchase additional shares of common stock in this offering in full, our pro forma as adjusted net tangible book value per share after the offering would be \$3.37 per share, the increase in the pro forma as adjusted net tangible book value per share to existing stockholders would be \$1.71 per share and the dilution to investors participating in this offering would be \$3.63 per share.

Risk Factor – “Our principal stockholders will exercise significant control over the company”:

Immediately after this offering, our executive officers, directors and entities affiliated with our five percent stockholders will beneficially own, in the aggregate, shares representing approximately 50.9% of our outstanding voting stock, not taking into account shares of common stock that certain existing holders of five percent or more of our voting securities and stockholders who are affiliated with certain of our directors may purchase in this offering, as described above under “Potential purchases by existing stockholders.” If these stockholders were to purchase an aggregate of \$15.0 million in shares of common stock as described above, our

executive officers, directors and entities affiliated with our five percent stockholders would beneficially own, in the aggregate, shares representing approximately 62% of our outstanding voting stock after the completion of this offering. The above percentages assume the conversion of approximately \$23.7 million in principal and accrued interest on our 2013 Notes upon the completion of this offering at an initial public offering price of \$7.00 per share, the midpoint of the price range set forth above, that this offering is completed on October 4, 2013 and that we repay in cash approximately \$0.1 million in principal and accrued interest under our 2013 Notes issued in August 2013 in lieu of the issuance of 8,351 shares of common stock upon conversion of such notes, which, if issued, would cause the holders of such notes, together with their affiliates and related entities, to beneficially own 15% or more of our outstanding common stock following the completion of this offering. Although we are not aware of any voting arrangements that will be in place among these stockholders following this offering, if these stockholders were to choose to act together, as a result of their stock ownership, they would be able to influence our management and affairs and control all matters submitted to our stockholders for approval, including the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC's website at www.sec.gov. Alternatively, the issuer, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by contacting Cowen and Company, LLC, c/o Broadridge Financial Services, Attention: Prospectus Department, 1155 Long Island Avenue, Edgewood, New York 11717, Telephone: 631-274-2806, Fax: 631-254-7140; or BMO Capital Markets Corp., Attention: Equity Syndicate Department, 3 Times Square, New York, NY 10036, Telephone: 800-414-3627, Email: bmoprospectus@bmo.com.