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

DIVISION OF
CORPORATION FINANCE

July 17, 2013

Via E-mail
Scott Wolchko
Chief Financial Officer and Chief Operating Officer
Fate Therapeutics, Inc.
3535 General Atomics Court, Suite 200
San Diego, CA 92121

Re: Fate Therapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted June 20, 2013
CIK No. 0001434316

Dear Mr. Wolchko:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

General

1. We note that some of your exhibits have not yet been provided. Please file any additional exhibits with your amended draft or as soon as practicable thereafter. Please note we may have additional comments upon examination of your exhibits.
2. Please confirm that the graphics included in your registration statement are the only graphics you will use in your prospectus. If those are not the only graphics, please provide proofs of any additional graphics prior to their use for our review. Please note that we may have comments regarding this material.
3. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications. Similarly, please

supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

4. We will deliver comments to your confidential treatment request under separate cover.

5. Please consider including a risk factor and/or other appropriate disclosure indicating any risks or uncertainties related to procuring umbilical cord blood for use in your ProHema product. For example, you should disclose how you obtain your supply and whether there are any factors you are aware of that might place your future supply at risk. Are there any regulatory, ethical, political, economic or technical factors that may be relevant to your ability to procure the umbilical cord blood supply?

Prospectus Summary, page 1

6. You use some technical and scientific terms in the forepart of the prospectus without clarifying their meaning. Please explain the significance of the following terms where they are first used in the Prospectus Summary section;
    - Homing,
    - Engraftment,
    - ex vivo,
    - in vivo,
    - allogeneic,
    - autologous,
    - neutrophil engraftment,
    - platelet engraftment.

7. Please expand the third bullet under "Our Risks" on page 4 to also disclose the uncertainty of successfully completing the clinical phase and obtaining FDA approval in addition to uncertainties regarding the time and cost of development and commercialization all of which exist because of the novel nature of the technology and the platform.

Risk Factors, page 10

8. In the risk factor on page 17 regarding orphan designation, please identify and briefly describe the two orphan designations you have received.

9. On page 20, you refer to the risk of failure by your manufacturer to abide by specific conditions under which ProHema must be manufactured. We note that the clinical cell processing facilities must manufacture ProHema within close proximity to the transplant center within a short period of time before the transplant. If there are any additional material conditions under which ProHema must be manufactured, please specify them in your disclosure.

10. You first use the acronym PCT on page 22. Please provide the long form of the acronym upon first introducing the term.

Capitalization, page 43

11. Your pro forma adjustments include the reclassification of warrant and exchangeable share liabilities to equity in conjunction with your offering. Please explain to us whether you anticipate recording any charges to earnings by marking these obligations to fair value immediately prior to settlement. If not, please tell us why not. If so, please tell us why your deficit accumulated during the development stage is the same amount in both your actual and pro forma columns. In addition, given the number of transactions in your pro forma adjustments, please tell us your consideration for providing complete pro forma information under Article 11 of Regulation S-X.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Significant Judgments and Estimates

Stock-Based Compensation, page 54

12. We have reviewed your stock-based compensation disclosures and have the following comments:
    - Revise your disclosure to quantitatively illustrate how each market approach was weighted in your various valuations to determine how to allocate the enterprise value at each valuation date.
    - You state the current value method was considered in your valuation. Please clarify the valuation dates that you incorporated this method and separately explain to us why its use is appropriate.
    - Please revise your disclosure to clarify why the value of the shares issued prior to July 2012 are higher than the value of shares issued between July 2012 and February 2013.
    - We note that you used a cost of capital 25% at the March 2013 valuation date. Please tell us, and disclose the source used to determine the assumed cost of capital at each period.
    - Please update the tables on page 55 through the date of effectiveness of your registration statement.
    - At the top of page 58 you indicate that you utilized the closing of your Series C preferred stock financings in May and July 2012 to help determine your enterprise value in estimating your common stock value in July 2012. Please tell us whether any new investors participated in your Series C preferred stock financings and if so whether they led the pricing negotiations. If not, please tell us how you the price of your Series C preferred stock is representative of your enterprise value in July 2012.
    - Please note we may have additional comments on your accounting for stock compensation and related disclosure once you have disclosed an estimated offering price. Please provide quantitative and qualitative disclosures explaining the difference between the estimated offering price and the fair value of the most recent issuance.

Warrant Liability, page 60

13. Please quantify the assumptions used to determine the fair value of the warrant liabilities and the exchangeable share liability and clarify how the assumptions changed at each period.

Business, page 68

Product Candidate, page 69

14. In the table on page 69 one of the columns is titled "Targeted Orphan Disorders." Please include an additional column or footnotes noting the indications for which you have applied and received orphan designation.

Our Strategy, page 71

15. Please expand your disclosure of "efficient clinical development and expedited regulatory pathways" to include any specific regulatory procedures you plan to pursue.

Our HSC Modulation Platform and Product Candidates, page 71

16. We note that you previously filed an IND for ProHema and will file an amended IND to include the NRM formulation in the near future. However, you should also clarify whether you will need to file separate INDs for;
    - ProHema for pediatric hematologic malignancies for which you intend to begin Phase I trials in the near future and
    - ProHema for LSDs for which they intend to begin clinical trials in 2014.

    If no additional IND will be needed to commence the clinical phase of either of these two additional indications of ProHema, please state why that is the case. If you do intend to file any additional INDs, please disclose when you intend to make such filings with the FDA.

Certain Relationships and Related Party Transactions

17. For the table on page 120, please provide a column indicating the number of shares of common stock into which the Class C Preferred Stock held by the affiliates will convert at the time of the initial public offering.

Shares Eligible for Future Sale, page 131

18. Once available, please file copies of each of the lock-up agreements.

Notes to Consolidated Financial Statements

2. Asset Acquisition of Verio Therapeutics Inc., page F-18

19. Please tell us and revise your disclosure to clarify how you determined the number of shares of common stock of the Company to be issued upon exchange of the Exchangeable Shares. Additionally, please disclose the certain conditions that must be met in order to exchange the Exchangeable shares.

5. Convertible Preferred Stock and Stockholders' Deficit

Description of Securities

Conversion, page F-25

20. Please clarify for us and in your disclosure the nature of the adjustments to the conversion price, and the accounting impact, if any such adjustments have or will have on your shares. Reference for us separately the authoritative literature you rely upon to support your accounting.

Expected Volatility, page F-30

21. Please revise your disclosure to explicitly state whether you used only implied volatility, historical volatility, or a combination of both. Refer to Question 5 of SAB 14:D1.

6. Collaboration Agreement, page F-31

22. With respect to the BD Agreement, please disclose the amount of the upfront nonrefundable license payment received in September 2010. Further with respect to the commercialization milestones, please provide the disclosures required under paragraphs b – d of ASC 605-28-50-2.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm.

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Tabatha Akins at (202) 551-3658 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Margaret Yang at (202) 551-3877 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Kingsley Taft
Mitzi Chang
Goodwin Procter LLP