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

DIVISION OF
CORPORATION FINANCE

May 2, 2014

Via E-mail
Arie S. Belldegrun, M.D.
President and Chief Executive Officer
Kite Pharma, Inc.
2225 Colorado Avenue
Santa Monica, CA 90404

Re: Kite Pharma, Inc.
Confidential Draft Registration Statement on Form S-1
Submitted April 4, 2014
CIK No. 0001510580

Dear Dr. Belldegrun:

We have reviewed your confidential 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 confidential 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 confidential draft registration statement or filed registration statement, we may have additional comments.

General

1. Please submit all outstanding exhibits as soon as practicable. We may have further comments upon examination of these exhibits.

2. Please provide us proofs of all graphic, visual or photographic information you will provide in the printed prospectus prior to its use, for example in a preliminary prospectus. 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 note the disclosure following your table of contents indicating that you have not independently verified the data included in the prospectus as derived from industry publications, third-party research, surveys and studies. It is not appropriate to directly or indirectly disclaim responsibility for the information included in the prospectus. Please revise you registration statement to remove this statement.

Prospectus Summary, page 1

5. We note your reference to KTE-C19 as your lead product candidate. However, we also note that clinical trials for KTE-C19 are currently being conducted by NCI and that under your CRADA with NCI you only have the option to negotiate commercialization licenses from NCI with respect to product candidates being funded. Accordingly, please revise your disclosure to clarify your current ownership rights with respect to KTE-C19 and whether you have negotiated a commercialization license for KTE-C19 from NCI.

6. We note that you are currently funding several Phase 1-2a trials being conducted by the NCI. Please revise your disclosure to indicate whether you have submitted Investigational New Drug Applications (INDs) with the Food and Drug Administration in relation to each of these clinical trials. If not, please explain why the filing of an IND is not necessary. In this regard, we also note your disclosure elsewhere in the prospectus that indicates your plans to file an IND in 4Q 2014.

7. Please explain the basis upon which accelerated approval of your BLA for KTE-C19 may be granted by the FDA.

8. Please explain the term "clinically meaningful" as used to describe the tumor shrinkage observed in the on-going Phase 1-2a trial for KTE-C19.

9. We note your reference to the FDA's grant of orphan drug status with respect to KTE-C19. Please revise your disclosure to briefly describe the benefits that such designation provides and clarify that such designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

Our Strategy, page 3

10. Please revise your disclosure to specify the duration of your CRADA with NCI as discussed under the second heading of this section.

Risks Associated With Our Business, page 4

11. Please revise your prospectus summary to include a more specific description of your most material risks. In particular, please include your total accumulated deficit in bullet point 1, the current phase of your most advanced clinical trials in bullet point 3, the specific intellectual property and third parties on which you are dependent in bullet point 11, and the identity of the key executives mentioned in bullet point 13.

Risk Factors
"Our product candidates may cause undesirable side effects…," page 13

12. Please revise your disclosure to clarify that the NCI Phase 1-2a clinical trial of anti-CD19 CAR T cell therapy you are referring to is KTE-C19. Please also include this clarification elsewhere in the prospectus in which your discuss NCI's Phase 1-2a trials of anti-CD19 CAR T cell therapy.

13. Please revise this risk factor to highlight the occurrence and frequency of treatment-related adverse events and serious adverse events in any of the various clinical trials you are funding being conducted by NCI. Please also specify the particular clinical trial in which any of the events occurred.

Use of Proceeds, page 42

14. Pursuant to the requirements of Item 504 of Regulation S-K, where you have identified the specific purposes for which you intend to use the offering proceeds, you must disclose the approximate amount of proceeds intended to be used for each such purpose. In this regard, please provide an estimate of the amount of proceeds that you intend to use for the each of the two separate clinical trials of KTE-C19, to fund additional product candidates, to fund build out of your internal research and development capabilities, and for working capital and general operating expenses.

    You may, as necessary, provide additional disclosure that advises investors of the particular factors and assumptions that form the basis of your estimate, any uncertainty surrounding these amounts and the reasons that the actual use of proceeds could vary. Please make any necessary conforming changes to your Prospectus Summary as well.

15. Please expand disclosure in this section to indicate whether you expect the proceeds from this offering together with existing cash and cash equivalents to enable you to complete the two trials for KTE-C19. If not, please disclose what the offering proceeds and your existing cash will allow you to accomplish as to each partially funded trial.

Management's Discussion and Analysis
NIH License Agreement, pages 51-52

16. Please disclose the expiration date of the last-to-expire patent that relates to the term of this license agreement. Please similarly disclose this information as the agreement is described on page 78.

Critical Accounting Policies and Significant Judgments and Estimates
Stock-Based Compensation
Determining fair value of stock options, page 59

17. We may have additional comments on your accounting for stock compensation or any beneficial conversion features once you have disclosed an estimated offering price. Please supplementally provide us with a quantitative and qualitative analysis explaining the difference between the estimated offering price and the fair value of each equity issuance through the date of effectiveness for the preceding twelve months.

Business
KTE-C19, page 68

18. To the extent feasible, please provide an estimation of the size of the DLBCL patient population who would be eligible to receive KTE-C19 as a third line therapy. Please similarly include this disclosure in the risk factor relating to market opportunity on page 14.

Clinical Experience, page 69

19. Please revise your disclosure to identify the primary endpoints being measured in the Phase 1-2a trials.

Efficacy, page 70

20. Given that this Phase 1-2a trial was designed to establish a dose level and assess overall safety, please clarify in your disclosure the extent to which you can rely on these observations relating to efficacy in future regulatory filings with the FDA.

21. Please disclose the total number of remissions without cancer progressions.

Safety, page 72

22. Please revise your disclosure to indicate whether the two deaths reported here were determined to be unrelated to treatment.

23. Please revise your disclosure to indicate which of the adverse events identified were determined to be treatment-related.

24. Please revise to include disclosure relating to how each of the 21 patients were dosed, and include a complete discussion of adverse events as related to level of dosing.

Additional eACT-Based Product Candidates, pages 73-74

25. We note your disclosure that you are currently funding NCI Phase 1-2a clinical trials involving a CAR-based product candidate targeting the EGFRvIII antigen in patients with glioblastoma and TCR-based T cell therapies for certain antigen targets. Please revise your disclosure to provide additional information about these trials including:

    - The location of the trials;
    - The number of patients enrolled to date;
    - The current status of the trial;
    - The primary endpoints;
    - The specific indication targeted; and
    - The results obtained.

    If data for these trials are not yet available, please provide an estimate of when they will become available.

Intellectual Property, pages 75-77

26. We note your 10 issued U.S. patents covering CAR constructs begin to expire in 2015. Please disclose the expiration date of the most significant patent(s) in this portfolio. If you consider all of your composition-of-matter patents significant, please provide the full range of expiration dates for those patents. Please further clarify, if true, that these patents represent all of the material patents underlying KTE-C19.

27. Please revise your disclosure to describe the patent portfolio underlying your TCR-based product candidates, including the expirations dates for the most material patents underlying your TCR technology, the jurisdictions in which patents have been granted, the jurisdictions in which patent applications have been submitted, and the types of patent protection granted (e.g., method of use, composition of matter, etc). Please also specify which patents are directly applicable to your TCR-based product candidates and identify such product candidates.

Competition, page 79

28. Please disclose the extent to which you believe you will face competition from the alternative immunotherapies designed to treat cancer you discuss on pages 67-68.

Certain Relationships and Related Party Transactions
Consulting Agreement with Two River Consulting, LLC, page 109

29. Please file this agreement as an exhibit to your registration statement as required under Item 601(b)(10)(ii)(A).

Shares Eligible for Future Sale
Lock-up Agreements, page 120

30. Please file the form of lock-up agreement as an exhibit to your registration statement.

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 Dana Hartz at (202) 551-3648 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Austin Stephenson at (202) 551-3192, Bryan Pitko at (202) 551-3203, or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ *Bryan J. Pitko* for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Fred Muto, Esq.
Cooley LLP