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

DIVISION OF
CORPORATION FINANCE

May 8, 2014

Via E-mail
Isaac E. Ciechanover, M.D.
Chief Executive Officer
Atara Biotherapeutics, Inc.
3260 Bayshore Boulevard
Brisbane, CA 94005

Re: Atara Biotherapeutics, Inc.
Draft Registration Statement on Form S-1
Confidentially Submitted April 10, 2014
CIK No. 0001604464

Dear Dr. Ciechanover:

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 there are a number of additional exhibits that have yet to be filed. Please provide these exhibits as promptly as possible. Please note that we may have comments on these materials once they are provided.

2. We note that you intend to request confidential treatment for portions of information contained in your exhibits. If you have not done so, please submit your application for confidential treatment as soon as possible so that we may begin our review of your request. Any staff comments to your application will be sent separately from comments to your draft registration statement.

3. 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 any additional graphics prior to their use for our review.

4. 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.

Prospectus Summary,
Corporate Information, page 4

5. Please revise your disclosure in this section, in your risk factor on page 42 and on page 62 under the header "Emerging Growth Company Status" to describe how and when a company may lose such status.

6. We note your disclosure on page 63 which states that you are opting out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act. Please expand your disclosure to discuss your election under Section 107(b) of the JOBS Act in this section as well. Also, please expand your disclosure in this section and on page 63 to include a statement that the election is irrevocable.

Risk Factors, page 10

7. Please add an appropriately titled risk factor discussing your ability to use your net operating loss carryforwards. In doing so, please quantify the amount of your net operating loss carryforwards and provide similar information to that contained in the section entitled "Income Taxes" on page 60 of your registration statement.

Risks related to Our Intellectual Property
If we are unable to obtain and maintain sufficient intellectual property…, page 24

8. Please expand your risk factor discussion to highlight the current expected expiration date for the patents underlying your most advanced product candidates, PINTA 745 and STM 434.

Risks Related to the Commercialization of Our Product Candidates
If we and our third-party manufacturers fail to comply with environmental…, page 39

9. Please disclose here and elsewhere in the risk factors where you address the company's liability risks and corresponding insurance coverage that you carry insurance coverage with policy limits that are customary for similarly situated companies and adequate to provide you with insurance coverage for foreseeable risks.

Special Note Regarding Forward-Looking Statements and Industry Data, page 48

10. Please note that it is not appropriate to state or imply that you do not have liability for the statements in your registration statement. Your statements on page 48 that you "have not independently verified market and industry data from third-party sources" and that "neither your research nor your market definitions have been verified by any independent source" could imply that you are not taking liability for the statistical and other industry and market data included in your registration statement. In order to eliminate any inference that you are not liable for all of the information in your registration statement, please delete these statements or include a statement specifically acknowledging responsibility for the accuracy of these statements and potential liability under the federal securities laws.

Use of Proceeds, page 49

11. To the extent practicable, please disclose how far in the planned confirmatory Phase 2 and initial Phase I clinical trials of, respectively, PINTA 745 and STM 434, you estimate the offering proceeds and existing cash resources will enable you to reach.

Capitalization, page 52

12. Please tell us why the issuance of the 2,204,693 shares of Series B convertible preferred stock in January 2014 and the subsequent conversion into common stock immediately prior to the closing of this offering is excluded from pro forma.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Accrued Research and Development Expenses, page 58

13. Please revise your disclosure to clarify whether changes in estimates have been material for each period presented, quantifying any material changes in estimate.

Business, page 69

14. Where the following terms first appear in this section and the Prospectus Summary, please give the meaning and significance of such terms in plain language that may be understood by a lay reader not acquainted with the relevant industry or scientific field.

    - statistical significance;
    - murine surrogate;
    - FDA breakthrough designation;
    - upregulated;
    - CKD;
    - histological; and
    - ligand

15. Please specify the studies to which you refer in the fifth paragraph on page 69 regarding the beneficial properties demonstrated by PINTA 745.

Our Product Candidates, page 72

16. Please disclose, where applicable in your discussion of your product candidates in development, including PINTA 745 and STM 434, when INDs were filed for the commencement of clinical trials, the name of the trial sponsor and, with respect to PINTA 745, whether any INDs remain open. If an IND was not filed pertaining to any of your clinical trials, please explain why the IND was not required.

Preclinical Studies, page 76

17. We note that your preclinical trials make reference to p-values in the charts provided and results that were statistically significant. Please explain what the term "p-value" refers to and what it indicates about the statistical significance of results obtained from the trials.

PINTA 745 Phase 1 Clinical Studies – Safety and Tolerability, page 78

18. Please quantify what you mean by "decreased slightly" and "remained slightly lower" when you state, "Of note, body fat decreased slightly in the 3.0 mg/kg group at the end of the treatment period and remained slightly lower than baseline four weeks after the cessation of treatment."

STM 434, a Targeted Therapy for Ovarian Cancer and Potentially other Solid Tumors
Preclinical Studies
TOV-21G Mouse Models (Clear Cell Ovarian Tumors), page 85

19. We note that in a subsequent preclinical study where you evaluated STM 434/s in a TOV-21G model used as both a single agent and in combination with the chemotherapy

agent 5-fluorouracil, results from these experiments showed a statistically significant reduction in tumor volume for the agent. In addition to the accompanying table, please expand the narrative description of the study to quantify the statistically significant reduction in tumor volume.

Inhibin Knockout Mouse Model (Granulosa Cell Tumors), page 87

20. We note that that knockout model treated with STM 434/s showed a statistically significant improvement in survival as compared to knockout mice treated with saline. Please expand your disclosure to quantify the statistically significant improvement in survival and include p-values.

Pipeline, page 88

21. We note that you have five pipeline product candidates in the research stage, but that you only provide a description of three of these programs. Please expand your disclosure to provide a description of your other two programs.

License Agreements, page 90

22. Please expand your disclosure to quantify the amount of shares of Series A-1 preferred stock which you issued to Amgen under all of your license agreements. Also, please disclose that each share of preferred stock will convert to one share of common stock immediately prior to the completion of this offering

23. Please quantify the amount of fees you have paid to Amgen to date for clinical supplies under your license agreement for PINTA 745.

Intellectual Property
Patents, page 91

24. Please disclose the expected expiration dates for your U.S. patents separately from your non-U.S. patents.

Employment Arrangements
Gad Soffer, page 111

25. Please clarify whether Mr. Soffer's employment agreement entitles him to any termination-based payments or benefits.

Lock-Up Agreements, page 129

26. Please confirm that the lock-up agreement will be filed as part of the underwriting agreement. If not, please file the form of lock-up agreement as an exhibit.

Notes to Combined Financial Statements
2. Summary of Significant Accounting Policies
Basis of Presentation, page F-7

27. Please provide us an analysis that supports presenting the financial statements on a combined basis. Please demonstrate how Atara, Nina, Pinta and Santa Maria were under common control or management and provide the ownership and management information for each of the companies separately. Clarify what management functions Atara provided other than the payment of common expenses as disclosed in Note 1 and whether Atara has provided or provides management functions to entities besides Nina, Pinta and Santa Maria.

Stock-based compensation expense, page F-10

28. Please provide the disclosure regarding expected volatility required by ASC 718-10-50-2.f.2.ii.

29. 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 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.

9. Subsequent Events, page F-22

30. Please describe to us the accounting you will ascribe to the Recapitalization and provide us an analysis to support that accounting with reference to appropriate authoritative literature.

31. Please tell us how earnings per share will be calculated and presented in financial statement periods that precede and include the recapitalization with reference to appropriate authoritative literature.

32. Please explain how you calculated the number of shares of common stock after the recapitalization of 1,693,687 since it does not appear to be calculated by using the number of shares before the recapitalization of 16,443,185 exchanged on a nine-for-one basis.

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 Vanessa Robertson at (202) 551-3649 or James Rosenberg at (202) 551-3679 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ *Daniel Greenspan for*

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Jodie Bourdet, Esq.
Cooley LLP