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

DIVISION OF
CORPORATION FINANCE

July 1, 2015

Via E-mail
Stephen G. Dilly, M.B.B.S., Ph.D.
President and Chief Executive Officer
Aimmune Therapeutics, Inc.
8000 Marina Blvd, Suite 300
Brisbane, CA 94005

Re: Aimmune Therapeutics, Inc.
Draft Registration Statement on Form S-1
Submitted June 4, 2015
CIK No. 0001631650

Dear Dr. Dilly:

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.

Prospectus Summary
Overview, page 1

1. Please describe what you mean when you state that all 23 patients who completed the AR101 treatment regimen were desensitized to "clinically meaningful levels" of peanut protein, which is a level that "substantially" exceeds the amount of peanut protein typically encountered in an accidental exposure by quantifying the terms "clinically meaningful levels" and "substantially."

2. We note that AR101 has been granted "Fast Track" designation by the FDA. Please describe the meaning and significance of being granted "Fast Track" designation the first time you refer to it in this section.

Our Lead Proprietary Product Candidate, page 2

3. In the fourth bullet point in this section, please briefly identify the mild, intermittent side effects that patients experienced during the up-dosing phase of your ARC001 study.

4. Please revise your disclosure to remove any reference to p-values in the prospectus summary. Discussion of p-values should be limited to sections of the prospectus where additional information on clinical results provides context for evaluating such information.

Risk Factors

5. We note your disclosure on page 140 that your amended and restated bylaws will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on your behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against you arising pursuant to the Delaware General Corporation Law, your amended and restated certificate of incorporation or your amended and restated bylaws; or any action asserting a claim against you that is governed by the internal affairs doctrine. Please include an appropriately titled risk factor disclosing that your amended and restated bylaws will include the exclusive forum provision described above. Please also highlight that such a provision may limit a shareholder's ability to bring a claim in a judicial forum that it finds favorable for the disputes listed above and may discourage lawsuits with respect to such claims.

Risks Related to Our Business
Clinical drug development involves a lengthy and expensive process with an…, page 14

6. We note your disclosure in the first paragraph on page 15 that subsequent to filing your IND for AR101, the FDA put your Phase 2 clinical trial on hold in order to obtain additional information regarding your manufacturing process and the design of the clinical trial. Please expand your disclosure to describe the additional information regarding your manufacturing process and the design of the clinical trial, whether there were any issues relating to the manufacturing process and the design of the trial and if so, how these issues were resolved. Also, please provide conforming disclosure in the part of your Business section where you describe your IND for AR101.

We rely exclusively on the Golden Peanut Company to provide the source…, page 18

7. Please expand your disclosure under this risk factor to describe under what circumstances GPC may terminate its exclusive commercial supply agreement with you.

Risks Related to Our Common Stock and This Offering
Our ability to utilize our net operating loss carryforwards and certain other…, page 51

8. Please expand your disclosure in this risk factor to quantify your federal and state net operating loss carryforwards and when they will begin to expire.

Use of Proceeds, page 55

9. In the first bullet point of this section, please state whether the allocated proceeds will allow you to fund your planned Phase 3 trial of AR101 to completion. If not, please describe how far in the trial process the allocated proceeds will allow you to reach.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Critical Accounting Policies and Significant Judgments and Estimates
Common Stock Valuation, page 66

10. You disclose that in order to determine the fair value of your common stock underlying option grants, your board of directors considered contemporaneous valuations prepared by an unrelated third party valuation firm at March 31, 2013, May 31, 2014 and February 28, 2015 and that these valuations were prepared using PWERM. Please revise your disclosures to include the nature of the material assumptions used in PWERM at each valuation date. In addition, disclose whether a market or income approach was used to determine equity value.

11. We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.

Business
Overview, page 76

12. We note that in the first full paragraph on page 78, you provide data, including p-values, regarding your ARC001 trial which was presented at the EAACI. Please revise your disclosure to explain the meaning and significance of "p-values" and how they relate to the FDA's evidentiary standards of efficacy at your first references to them in this section. To the extent that your explanation of "p-values" involves a discussion of "statistical significance," please explain the relationship between the terms.

Phase 2 Clinical Trials – ARC001, page 86

13. Please expand your disclosure to discuss when you submitted your IND for AR101, the subject of the IND and when it was approved by the FDA.

Intellectual Property, page 93

14. Please revise your disclosure to identify in which "other jurisdictions" you have pending patent applications for AR101.

15. We note that your filed patent applications for AR101 relate to the manufacture, formulation, stability and other aspects of AR101. Please clarify what you mean when you state that your filed patent applications relate to "other aspects" of AR101. Also, please clarify which type of patent protections your patent applications are seeking such as compositions of matter, use or process.

Other Comments

16. We note that there are a number of additional exhibits that still need 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.

17. 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.

18. 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.

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 Christine Torney at (202) 551-3652 or Sharon Blume at (202) 551-3474 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170, John Krug at (202) 551-3862 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Brian J. Cuneo, Esq.
Latham & Watkins LLP