Via Facsimile and U.S. Mail Mail Stop 4720

November 9, 2009

Dr. Harvey J. Berger, M.D. Chairman and Chief Executive Officer ARIAD Pharmaceuticals, Inc. 26 Landsdowne Street Cambridge, MA 02139

Re: ARIAD Pharmaceuticals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2008

Filed March 16, 2009

Schedule 14A filed April 30, 2009

File Number: 000-21696

Dear Dr. Berger:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosures. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended December 31, 2008

Item 1. Business

Our Licenses to Third Parties, page 7

Our Stent Collaborations, page 8

- 1. We note your disclosure on page 8 that you have entered into license agreements with Medinol and ICON to develop and commercialize deforolimus-eluting stents to prevent restenosis of injured vessels following interventions in which stents are used in conjunction with balloon angioplasty. Please expand your description of these agreements to disclose the following information:
 - All material rights and obligations of the company and the other party;
 - The range of royalty rates (for example, "low-single-digits," "high-single-digits," etc.);
 - The aggregate amount of milestone or other payments payable or receivable to each party, and the amounts paid to date; and
 - Duration and termination provisions.
- 2. We note that you have not filed the license agreement with ICON as an exhibit to your Form 10-K. We further note your disclosure in the risk factor entitled "We have no product candidates that have been approved by the FDA . . ." on pages 16 and 17 that you are dependent upon the success of ICON and any future medical device partner to successfully develop, manufacture and market stents or other medical devices to deliver deforolimus. Please file the agreement with ICON as an exhibit, or provide us with a legal analysis as to why the agreement need not be filed as an exhibit pursuant to Item 601(b)(10) of Regulation S-K.

Our Licenses from Third Parties, page 8

- 3. We note that you have entered into an exclusive license agreement with MIT and the Whitehead Institute, as well as an exclusive license agreement with Stanford University, to rights to certain of your proprietary technologies. You disclose on pages 8 and 9 that these agreements provide for the payment by you to these academic institutions of an up-front fee, license maintenance fees, a milestone payment, sublicense fees, and royalties based on commercial sales of products and processes developed using the technologies. Please expand your description of these agreements to disclose the following information:
 - All material rights and obligations of the company and the other party;
 - The range of royalty rates (for example, "low-single-digits," "high-single-digits," etc.);

- The aggregate amount of milestone or other payments payable or receivable to each party, and the amounts paid to date; and
- Duration and termination provisions.

Schedule 14A

Certain Relationships and Related-Person Transactions, page 16

4. We note that in June 2007 you entered into an agreement with Dr. Berger and Mr. LaMarche in their individual capacities as stockholders of AGTI, and that pursuant to this agreement, you reimbursed these individuals \$259,000 in expenses. Please file this agreement as an exhibit to your Form 10-K pursuant to Item 601(b)(10)(ii)(A) of Regulation S-K.

Compensation Discussion and Analysis

Compensation Actions, page 27

Annual Performance and Long-term Incentive Awards, page 27

Performance Awards, page 28

5. We note your disclosure on page 25 that the Compensation Committee considers several individual performance factors in evaluating individual performance, but not all factors are applicable to each executive officer. We further note your disclosure on page 28 that Dr. Berger's performance award was based on the Compensation Committee's evaluation of your key corporate objectives and the impact of the leadership of Dr. Berger on your performance. In addition, you state on page 29 that performance awards for the named executive officers, other than Dr. Berger, were based primarily on an assessment of each individual's performance relative to the key corporate objectives as well as the individual and department objectives established for each officer.

Your Compensation Discussion and Analysis does not disclose the individual objectives used to determine each executive officers' annual performance-based bonus. While you have generally identified the individual performance factors that the Compensation Committee considers in evaluating individual performance, not all of the factors are applicable to each executive officer. Please provide us with draft disclosure for your 2009 proxy statement which provides the following:

• The performance objectives considered for each separate executive officer;

- Any threshold, target and/or maximum levels of achievement applicable to any of these objectives, to the extent they are quantifiable; and
- A discussion of how the level of achievement will affect the actual bonuses to be paid.

To the extent that the objectives are quantified, the discussion in your proxy statement should also be quantified. Please also confirm that you will disclose the level of achievement of these objectives.

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Please provide us the information requested within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your response to our comments. Detailed cover letters greatly facilitate our review. Please furnish your letter on EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

Please contact Rose Zukin, Staff Attorney, at (202) 551-3239 if you have any questions. In this regard, do not hesitate to contact me, at (202) 551-3715.

Sincerely,

Jeffrey P. Riedler Assistant Director