

Via Facsimile and U.S. Mail
Mail Stop 6010

February 19, 2009

Kurt Leutzinger
Chief Financial Officer
Pharmasset, Inc.
303-A College Road East
Princeton, NJ 08540

Re: Pharmasset, Inc.
Form 10-K for the Fiscal Year Ended September 30, 2008
Definitive 14A filed January 23, 2009
File No. 1-33428

Dear Mr. Leutzinger:

We have reviewed your February 17, 2009 response to our February 9, 2009 letter and have the following comments. We understand that you have filed but not mailed your definitive proxy statement. You should file a revised definitive proxy statement (DEF14A) prior to mailing incorporating the proposed disclosure included in your February 17, 2009 response letter as well as your responses to comments 4 and 5 below. With regard to comments 1, 2 and 3 below, where a comment requests you to provide revised 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 disagree or 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 filing.

Form 10-K for year ended September 30, 2008

Management's Discussion and Analysis
Research and Development Expenses, page 76

1. We note your response to our comment 3(a). Please disclose the fact that you do not maintain internal research and development costs by project and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the projects. For instance, in the company's disclosure presented in the Form S-1 amendment 6 filed April 6,

- 2007 on page 44, we noted the company's classification for unallocated research and development expenses aggregated into one line item classified as "unattributed expenses." Preferably, these expenses should be allocated by function (e.g. salaries and related personnel expenses, fees paid to external service providers, costs of preclinical studies and clinical trials, drug and laboratory supplies, costs for facilities, etc.) or any other manner the company believes would be useful to better understand the balance of the "unattributed expenses."
2. In addition, you proposed to include in future filings disclosure similar to that included in your previously filed Form S-1. However we note in the Form S-1 amendment 6 filed April 6, 2007 that the cumulative project costs are not presented to date. Please revise your disclosure to present these cumulative costs.

Contractual Obligations and Commitments, page 82

3. We note your response to our comment 4. It appears that the annual license fee that you are obligated to pay the University of Cincinnati under the research collaboration and license agreement entered into in October 2007 should be included in the contractual obligations table. Please revise your contractual obligation table to include this fee or or tell us why you do not believe this obligation should be included.

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Compensation Discussion and Analysis, page 19

4. We note your response to our prior comment 8 in which you provide a list of peer companies used in determining compensation packages for "new" executive officers. Please also provide a list of peer companies used in determining compensation packages for existing executive officers. If the list is the same, please so state or revise your disclosure to clarify.
5. We note your response to our prior comment 10. Although we understand your contention that disclosure of specific details regarding future plans for out-licensing and/or in-licensing of commercial rights to product candidates or other intellectual property through potential future collaborations with third parties could put the company at a disadvantage in negotiations, we do not believe that a general statement regarding this category of corporate goals will cause such harm and do believe that such information is material to investors. Therefore, please add a statement to your disclosure indicating that continued out-licensing and/or in-licensing of commercial rights to product candidates or other intellectual property through potential future collaborations with third parties is one of the company's corporate objectives for fiscal year 2009.

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Please amend your Definitive 14A and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your response to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

Please contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact Laura Crotty, Staff Attorney, at (202) 551-3563 or Jeffrey Riedler, Assistant Director, at (202) 551-3715 with questions on any of the other comments.

Sincerely,

Jeffrey Riedler
Assistant Director