

Via Facsimile and U.S. Mail
Mail Stop 6010

August 31, 2007

Mr. James S. Burns
President and Chief Executive Officer
EntreMed, Inc.
9640 Medical Center Drive
Rockville, MD 20850

**Re: EntreMed, Inc.
 Form 10-K for Fiscal Year Ended December 31, 2006
 File No. 0-20713**

Dear Mr. Burns:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In our comments, we ask you to provide us with more information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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 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, 2006

Notes to Consolidated Financial Statements

Note 3: Acquisition, page F-12

1. You disclose the acquisition of Miikana Therapeutics, a private biotechnology company, in which you allocated the purchase price entirely to identifiable tangible assets and in-process research and development. Please address the following comments:
 - a. You disclose that you valued the shares of common stock you issued in the acquisition based on the closing value of your stock on the date of acquisition. Please explain to us why you did not apparently value these shares of common stock at the average price for the period beginning a few days before and

ending a few days after the announcement of your acquisition as required by EITF 99-12. Otherwise, please demonstrate to us why the fair value of common stock you used is not materially different from that determined under EITF 99-12.

- b. You disclose that you accounted for the acquisition of Miikana as an asset purchase because Miikana did not qualify as a business acquisition under SFAS 141 and EITF 98-3. You also disclose that you allocated the purchase price first to the tangible assets acquired and liabilities assumed with the residual charged to expense as IPR&D as the development projects in Miikana's pipeline had not reached technological feasibility and you had no alternative future uses for these projects. Please explain to us why you did not allocate any of the purchase cost to an intangible asset (e.g. core technology, patent, etc.) to be used in research and development activities that may have alternative future use. In this regard, it is evident from the pro forma financial statements reflecting the acquisition in the Form 8-K/A filed on April 3, 2006 that you included \$4 million of anticipated identifiable intangible assets. In your response please specifically address the apparent customer relationship intangible asset existing between Miikana and Hoffmann-LaRoche, Inc.
- c. Please clarify whether you determined the fair value of the development projects of Miikana existing at the acquisition date and provide us in a disclosure-type format revise acquisition disclosure that provides all the information identified in paragraph 4.2.03 of the AICPA Practice Aid on IPR&D.

Note 8: Share-Based Compensation, page F-16

2. It appears that the warrants outstanding at December 31, 2003 included in your table on page F-19 include 1,025,000 warrants issued in conjunction with the sale of common stock on April 28, 2003. The common stock, the warrants and the common stock underlying the warrants appear to be issued pursuant to a shelf registration statement on Form S-3 No. 333-87940. It also appears that you are required to maintain the effectiveness of the registration statement at least until the expiration date of the warrants. Please explain to us why you apparently do not have a warrant liability reflected on your balance sheet. In your response, please specifically explain how you applied the guidance provided in EITF 00-19, especially paragraphs 14 through 18 regarding settlement with unregistered shares.

Note 9: Commitments and Contingencies, Page F-19

3. Although you disclose the amount of milestone payments you expect to make during 2007 related to your license and collaboration agreements, it is unclear whether you disclose the total amount of potential milestones for each agreement. In this regard, although you disclose that you paid \$500,000 in milestones to Elan

in 2005 for the initiation of Phase 2 clinical trials related to Panzem NCD and you disclose that no milestones were achieved in 2006, you do not appear to disclose what remaining milestones could potentially be paid. Please provide us in disclosure-type format revised disclosure that fully discusses your license and collaboration agreement obligations and summarizes the aggregate amounts that could become due if all milestone events are achieved. In addition, please provide us in disclosure-type format, a revised contractual obligations table in MD&A that at a minimum discusses in footnotes to the table your aggregate milestone obligations and the amounts you reasonably expect to pay within the next year.

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

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing 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 filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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 filing or in response to our comments on your filing.

Mr. James S. Burns
EntreMed, Inc.
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If you have any questions, please contact Mark Brunhofer, Senior Staff Accountant, at (202) 551-3638. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant