



DIVISION OF
CORPORATION FINANCE

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

July 2, 2012

Via E-mail

Mr. Donald J. Santel
Chief Executive Officer
601 Gateway Boulevard
Suite 200
South San Francisco, CA 94080

**Re: Hyperion Therapeutics, Inc.
Amendment #2 to Registration Statement on Form S-1
Filed June 18, 2012
File No. 333-180694**

Dear Mr. Santel:

We have reviewed your amended 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Management's discussion and Analysis of Financial Condition and Results of Operations
Financial Overview
Critical Accounting Policies and Estimates
Stock-Based Compensation, page 57

1. Please disclose the significant assumptions used at each valuation date for the company value and the PWERM allocation value such as the discount rate, volatility, for each scenario used in determining the fair values. Also disclose the information included in your response to comment 1b, including the exercise assumption, anticipated launch dates of each product considered, how sales and expenses were determined, and any other significant assumptions used.
2. Please clarify your response to comment 1b, where you state that you assume an increase in patients taking Ravicti over time, to tell us whether you also consider factors that may offset some of the increases (e.g. market competition).
3. Notwithstanding the above comments, we have read your response to comment one, but do not understand how an income approach methodology is appropriate for your facts and circumstances. Please address the following for each valuation date:
 - Clarify in the filing the amount of the risk premium and why you believe it appropriately factors in the uncertainty of receiving regulatory approval.
 - Tell us how your methodology considers others factors such as the terms of the agreement with Ucyclyd such that you have an option to purchase all of Ucyclyd's worldwide rights in BUPHENYL and AMMONUL for an upfront payment of \$22.0 million, plus subsequent milestone and royalty payments. In addition, if you exercise the option, Ucyclyd has a time-limited option to retain AMMONUL for a purchase price of \$32.0 million. If Ucyclyd exercises its option under the restated collaboration agreement and retains AMMONUL, the upfront purchase price for BUPHENYL will be \$19.0 million resulting in a net payment from Ucyclyd to you of \$13.0 million upon close of the transaction. Since the terms of the agreement may result in vastly different cash flows and stock values, please clarify how you captured the terms in your valuation analysis.
 - Clarify in the filing why you believe you have a reliable basis to estimate sales and expenses in estimating your stock valuation given you have never received regulatory approval for a product.
 - Based on your stage of development, the varying terms of your agreement, uncertainty in regulatory approval and the ability to estimate sales and expenses, it appears that a market approach which is more commonly used in your industry, such as the guideline public companies method, may be more appropriate. Please provide further explanation as to why you

believe an income approach is the most appropriate valuation methodology given your facts and circumstances.

4. Please expand your response to comment 1c to describe the steps you took in comparing your estimated common stock value to the range of IPO valuations within the Life Sciences industry. Your discussion should include how you selected the companies that are similar to you and the adjustments you made for the differences. If your comparison was simply to those companies in the life sciences industry and not limited to the companies that are similar to you, please tell us why you believe such comparison is meaningful. In addition, you state that the value for the Company falls within the range of the observed IPOs from 2005 to date. Please clarify what you mean by “falls within the range” and why using a range spanning to 2005 is meaningful as a means of validating your fair value.
5. We will continue to evaluate your accounting for stock compensation until an IPO price has been set. In this regard, please disclose the reasons for any changes in fair value between the last valuation date and the IPO price.

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange

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Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Ibolya Ignat at (202) 551-3656 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Nandini Acharya at (202) 551-3495, John Krug at (202) 551-3862 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey Riedler

Jeffrey Riedler
Assistant Director

cc: Laura A. Berezin, Esq.
Hogan Lovells US LLP
525 University Avenue
Palo Alto, CA 94301