

Mail Stop 4720

January 7, 2010

Peter M. Hecht
Chief Executive Officer
Ironwood Pharmaceuticals, Inc.
320 Bent Street
Cambridge, MA 02110

**Re: Ironwood Pharmaceuticals, Inc.
Registration Statement on Form S-1/A
Filed December 23, 2009
File No. 333-163275**

Dear Mr. Hecht:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with 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 filing. 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 S-1/A

General

1. We have reviewed the estimated pricing range you submitted on a confidential basis to the Staff on December 23, 2009 and note that the estimated pricing range exceeds \$2. Please refer to our prior comment 3. When you file a pre-effective amendment that includes a pricing range, it must be bona fide. We interpret this to mean that your range may not exceed \$2 if you price below \$20.

Risk Factors

Risks Related to Our Finances and Capital Requirements

“We have incurred significant operating losses...” page 23

2. We acknowledge your response to our previous comment 37. Please revise your disclosure to clearly indicate that the net loss numbers you present in this risk factor are those attributable to Ironwood shareholders.

Management’s Discussion And Analysis Of Financial Condition And Results Of Operations

Critical Accounting Policies and Estimates

Stock-based Compensation Expense, page 45

3. We acknowledge your response to our previous comment 23. You disclose that you identify publicly-traded peer companies for volatility assessment purposes that are in the biopharmaceutical industry, have products or product candidates in similar therapeutic areas and stages of preclinical and clinical development as you. It appears that only one of the five peer companies you identify in your response has no product revenues and that this company filed an NDA with the FDA. It also appears that the companies you identify may have larger product pipelines than you do. Product revenues and larger product pipelines appear to be indicative of reduced risk and, therefore, volatility. Please explain to us why your peer sample is appropriate and why you do not have a higher expected volatility than your peer group. Otherwise, please revise your peer group to include more companies with no product revenues and more comparable product pipelines, even if they do not have product candidates in similar therapeutic areas and revise your expected volatilities and related accounting, as appropriate.

Business, page 74

Our Company, page 75

4. Please refer to our prior comment 24. We note that you have disclosed a “double-digit” royalty range for each of the agreements with Forest Laboratories, Inc., Almirall, S.A. and Astellas Pharma Inc. Please revise your disclosure to narrow the potential range of royalty payments (for example, “low-teens” or “high-teens”). “Low double-digits” and “escalating double-digits” are not sufficiently narrow to provide meaningful information to investors.

Executive Compensation, page 116

Basis for Historical and Future Compensation Policies and Decisions, page 117

5. We note your response to comments 28 and 29 and your disclosure on page 117 that the compensation committee generally targets cash compensation at the 50th percentile as compared to peer group and survey data. From this discussion it appears that the compensation committee engages in benchmarking. Additionally, we note your disclosure on page 122 that no named executive officer received a salary increase in 2008 or 2009. To the extent that similar assessments are conducted in the future and delivered to the compensation committee and the committee adjusts salaries after considering the assessments, please confirm that you will identify all surveys and peer companies.

Compensation Actions in 2009, page 122

2009 Goals, page 122

6. We note that you set core goals and aggressive stretch goals. Please confirm that both the core and aggressive stretch goals have been disclosed.
7. Refer to our prior comment 32. Your revised disclosure indicates that, other than with respect to Dr. Hecht, individual performance goals are assessed in allocating compensation for your named executive officers. Please expand your disclosure to identify the specific individual performance goals for each of the named executive officers. To the extent any of these individual goals are quantifiable, please provide the numerical target or percentage, as appropriate. Finally, similar to your corporate performance goal disclosure, please indicate the level of actual achievement and how this achievement translated into the amount of compensation paid to each named executive officer.

Consolidated Financial Statements

Consolidated Statements of Operations, page F-4

8. We acknowledge your response to our previous comment 37. As previously requested, please revise your presentation of net loss throughout your filing to ensure that it includes the net loss attributed to the noncontrolling interest as required by FASB ASC 810-10-65-1b2. In this regard, it appears that your line item captioned "Net loss prior to amounts attributable to noncontrolling interest" is your consolidated net loss and should be labeled as "net loss." Also see FASB

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ASC 810-10-50-1A which indicates that the amounts attributable to the parent and to the noncontrolling interest are components of consolidated net income/loss.

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As appropriate, please amend your registration statement in response to these comments. 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 responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 Act of 1933 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 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 connection with our review of your filing or in response to our comments on your filing.

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 Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact James Peklenk at (202) 551-3661 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Nandini Acharya at (202) 551-3495, Suzanne Hayes at (202) 551-3675 or me at (202) 551-3715 with any other questions.

Peter M. Hecht
Ironwood Pharmaceuticals, Inc.
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Sincerely,

Jeffrey Riedler
Assistant Director

cc: Paul M. Kinsella
Ropes & Gray LLP
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