

Mail Stop 4720  
*Via Facsimile and U.S. Mail*

May 11, 2010

Marshall Woodworth  
Vice President-Finance  
Furiex Pharmaceuticals, Inc.  
3900 Paramount Parkway, Suite 150  
Morrisville, North Carolina 27560

**Re: Furiex Pharmaceuticals, Inc.  
Information Statement on Form 10-12B, filed February 24, 2010  
File No. 001-34641**

Dear Mr. Woodworth:

We have reviewed both your amended filing and your supplemental response dated April 29, 2010 and we 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Risk Factors

“If PPD waives one or more conditions to the spin off, it could adversely affect our operations ...,” page 15

1. We note your statement that waivers of other conditions could also have material adverse consequences. Please revise to describe the potential adverse consequences that may result from the waiver of other conditions.

Our Business

Priligy, page 43

2. We note your disclosure that the sales-based royalties range is in the low double-digit percentages. This range is too large to be meaningful. Please revise to use a range such as the “single-digits,” “teens,” “twenties,” etc. To the extent that this rate increases based in sales volume, you should clarify that the range also fluctuates. For example, if the royalty rate is in the mid-teens and rises as sales volume increases up to a maximum of 20%, your disclosure should reflect both ranges. Similarly, revise the relevant discussions on pages 45 and 47. Please be advised that we will not be able to clear these comments until this information is included in your registration statement.

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As appropriate, please amend your filings 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 supplemental information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR under the form type label CORRESP. 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 filings reviewed by the staff to be certain that they have provided all information investors 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.

In connection with responding to our comments, please provide, in writing, 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 in the filings reviewed by the staff 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.

Marshall Woodworth  
Furiex Pharmaceuticals, Inc.  
May 11, 2010  
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You may contact Keira Nakada at (202) 551-3659 or Donald Abbott at (202) 551-3608 if you have questions regarding comments on the financial statements and related matters. Please contact Scot Foley at (202) 551-3383 or Suzanne Hayes at (202) 551-3675 with any other questions.

Sincerely,

Jeffrey P. Riedler  
Assistant Director

cc: Alexander M. Donaldson, Esq.  
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