



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

DIVISION OF  
CORPORATION FINANCE

December 17, 2014

Via E-mail

Jonathan M. Peacock  
Chief Executive Officer  
Bellerophon Therapeutics LLC  
53 Frontage Road, Suite 301  
Hampton, New Jersey 08827

**Re: Bellerophon Therapeutics LLC  
Amendment No. 2 to Draft Registration Statement on Form S-1  
Submitted November 21, 2014  
CIK No. 0001600132**

Dear Mr. Peacock:

We have reviewed amendment no. 2 to your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus Summary

Company Overview

INOpulse

INOpulse for PAH, page 3

1. Please describe the meaning and significance of the term “statistical significance” at its first use in this section. In addition, please describe the meaning and significance of p-values the first time you provide such information in your Business section and how p-values relate to statistical significance.

Jonathan M. Peacock  
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Management's Discussion and Analysis of Financial Condition and Results of Operations  
Stock-Based Compensation, page 84

2. We may have additional comments on your accounting for equity issuances including stock compensation and beneficial conversion features. Once you have an estimated offering price, please provide us an analysis explaining the reasons for the differences between recent valuations of your common stock leading up to the IPO and the estimated offering price.

You may contact Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170, John Krug at (202) 551-3862 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
Lia Der Marderosian, Esq.  
Wilmer Cutler Pickering Hale and Dorr LLP