



DIVISION OF
CORPORATION FINANCE

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

November 16, 2010

Mr. Jon P. Stonehouse
President and Chief Executive Officer
Biocryst Pharmaceuticals, Inc.
2190 Parkway Lane Drive
Birmingham, AL 35244

Re: Biocryst Pharmaceuticals, Inc.
Form 10-K for the year ended December 31, 2009
Filed March 9, 2010
Definitive Proxy Statement on Schedule 14A
Filed April 6, 2010
File No. 000-23186

Dear Mr. Stonehouse:

We have reviewed your September 9, 2010 response to our August 25, 2010 letter and have the following comments.

Please respond to this letter within ten business days by providing us the requested information or by advising us when you will provide the requested response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing the information provided, we may have additional comments.

Schedule 14A

1. Please refer to your responses to comments 4, 5, and 6 in your response letter. Please note that when we ask you to revise your disclosure, we request that you amend your Form 10-K for the Fiscal Year Ended December 31, 2009 to include the requested disclosure. Accordingly, we will not be able to clear your filing of comments until you have filed an amended Form 10-K with the requested disclosure.

Form 10-K for the year ended December 31, 2009

Compensation Discussion and Analysis
Annual Incentive Compensation, page 24

2. We note your responses to Comments 4 and 5 and reissue the comments in part. Please expand the proposed disclosure to be included in an amendment to your Form 10-K for the fiscal year ended December 31, 2009 to disclose:

Mr. Jon P. Stonehouse
Biocryst Pharmaceuticals, Inc.
November 16, 2010
Page 2

- Specific examples of corporate and individual objectives that would increase the understanding of the corporate and individual objectives, respectively, as you propose to do in the future;
- The evaluation by the Compensation Committee of the level of achievement by the company of corporate goals and by each named executive officer of the individual performance objectives applicable to them.

Please note that it is not sufficient to disclose only the amounts awarded under the AIP in 2009 and the achievement of corporate objectives, instead of describing the Compensation Committee's assessment of the level of achievement of each individual performance objective. To the extent that you are concerned about the release of our correspondence, you may request confidential treatment pursuant to Rule 83. In order to do this, please file on EDGAR your supplemental response requesting confidential treatment under Rule 83, redacting the information you request to remain confidential. Please note that only those words, numbers and phrases for which confidentiality is necessary should be redacted. Further, an unredacted copy of your supplemental response requesting Rule 83 treatment must be mailed directly to the Staff.

Please note that in order to keep your performance metrics confidential pursuant to Instruction 4 to Item 402(b) of Regulation S-K you must submit an analysis supporting your conclusion that you are likely to suffer competitive harm if the information is disclosed. We are generally only willing to grant confidential treatment for performance goals if you can demonstrate how the disclosure of these goals will allow your competitors to discover information about break even points, cost structures relating to specific products or similarly sensitive information. In these instances, you must submit a detailed analysis, identifying the competitively harmful information and demonstrating how the information could be harmful to your company.

You may contact Rose Zukin, Staff Attorney at (202) 551-3239 with questions on the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant