

Via Facsimile and U.S. Mail
Mail Stop 6010

October 31, 2008

Mr. Stuart Grant
Chief Financial Officer
2190 Parkway Lake Drive
Birmingham, Alabama 35244

**Re: Biocryst Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2007
Form 10-Q for the quarter ended June 30, 2008
File No. 0-23186**

Dear Mr. Grant:

We have reviewed your September 29, 2008 response to our August 29, 2008 letter and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filing, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Form 10-K for the Fiscal Year Ended December 31, 2007

Item 1. Business

Collaboration and In-License Relationships, page 12

1. We note your response to our prior comment 1 and the proposed changes to the disclosure that will be included in future filings. Please expand your disclosure to also discuss the following information:
 - In your discussion of the *Mundipharma* corporate alliance, please disclose the percentage range of royalties (i.e., single digits, low teens, high teens, etc.).
 - In your discussion of the *AECOM and IRL* academic alliance, please disclose the aggregate potential milestone payments, the annual license fee, the

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percentage range of royalties on future sales of any resulting product, and each party's other rights and obligations.

- In your discussions of the *UAB* and *Emory* academic alliances, please disclose the percentage range of royalties.

Form 10-Q for the quarter ended June 30, 2008

2. We noted your response to our comment 8. Please tell us how you are accounting for the remaining portion of the revenue related to this contract (HSS). It would appear that the company's ability to estimate revenues related to the remaining portion of the HSS contract would be diminished as a result of HHS's change in reimbursable costs structure.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

Please contact Sasha Parikh, Staff Accountant, at (202) 551-3627 or Lisa Vanjoske, Assistant Chief Accountant, at (202) 551-3614 if you have questions regarding the processing of our response as well as any questions regarding comments on the financial statements and related matters. You may contact Sebastian Gomez-Abero, Staff Attorney, at (202) 551-3621 or Suzanne Hayes, Legal Branch Chief at (202) 551-3675 with questions on any other comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

James B. Rosenberg
Senior Assistant Chief Accountant