September 29, 2008

VIA EDGAR AND OVERNIGHT MAIL

Mr. Jim Rosenberg
Senior Assistant Chief Accountant
Division of Corporation Finance
U.S. Securities & Exchange Commission
100 F Street, NW
Washington, DC 20001-2016

Re: *BioCryst Pharmaceuticals, Inc.*
Form 10-K for the Fiscal Year Ended December 31, 2007
File No. 0-23186; Form 10-Q for the Quarter Ended March 31, 2008;
Form 10-Q for the Quarter Ended June 30, 2008

Dear Mr. Rosenberg:

This letter responds to your letter dated August 29, 2008 in connection with the above referenced file. To facilitate your review, we have reproduced your comments in bold below and have provided our response immediately following your comment.

1. To the extent not already disclosed, please include the following information in the discussion of each of your corporate alliances, academic alliances and government contracts:

- **each party's rights and obligations under the agreement**
- **the percentage range of royalties;**
- **the aggregate potential milestone payments; and**
- **the expiration and termination provisions.**

RESPONSE:

We believe the Company has disclosed the principal aspects of its material alliances. In certain cases, some of the details of the agreements have been afforded confidential treatment by the Staff under Rule 24b-2. Nevertheless, in response to your comment, we have reviewed the disclosure contained in our recent 10-K and have determined to make the disclosure more robust in the future by including information which had been disclosed in previous SEC filings. Exhibit A is a sample of such disclosure, which has been redlined for convenience.

2. Please tell us why it was appropriate under GAAP to defer $2.3 million in pre-contract costs incurred in 2006 and expense these costs in 2007.

RESPONSE:

The Company's contract with the U.S. Department of Health and Human Services ("HHS"), which was awarded on January 3, 2007, is a cost-plus-fixed-fee ("CPFF") contract. That is, the Company is entitled to receive reimbursement for all costs incurred related to the development of peramivir plus a fixed fee, or profit. The Company incurred $2.3 million of costs in 2006, which were directly associated with the contract and were incurred in anticipation of a contract award from HHS. These costs were required to meet the delivery schedule of the proposed contract, and based on discussions with the Contracting Officer and in accordance with the provisions of Federal Acquisition Regulation 31.205-32, the costs were eligible for reimbursement.

Chapter 3.10 of the American Institute of Certified Public Accountants ("AICPA") Audit and Accounting Guide for Government Contractors, states that pre-contract costs should be accounted for in conformity with paragraph 75a of AICPA Statement of Position No. 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts.* This guidance states that costs incurred for a specific anticipated contract may be deferred if the costs are directly associated with that contract and recoverability from the contract is probable. Therefore, the Company deferred the $2.3 million of costs incurred during the fourth quarter of 2006 and prior to the contract award date of January 3, 2007. The $2.3 million in costs were expensed in January 2007 and revenue in an equal amount plus the applicable fixed fee was recognized concurrently.

3. Please explain in expanded disclosure why you had such a significant receivable ($36.5 million) from HHS at December 31, 2007. Explain why revenue recognition in 2007 was appropriate. Page 41 indicates that you bill HHS monthly.

RESPONSE:

The Company invoices HHS for expenses incurred relative to work done within each calendar month. The internal and external process of generating these invoices is time consuming and results in the Company billing on average of 60 days after the period ends. The process of HHS reviewing these invoices involves multiple layers of review and approval which results in payment on average of in excess of 60 days beyond the date of invoice submission. As disclosed in the Company's 10-K for the year ended December 31, 2007, the Company had approximately $36.5 million due from HHS, of which $23.1 million was related to billed receivables and $13.4 million was related to unbilled receivables. The billed receivables represent the costs incurred and applicable fee for the months of July, August, September and October. The unbilled receivables represent the costs incurred and applicable fee for the months of November and December. All of these factors contributed to a build-up of receivables at December 31, 2007. As of the date of this letter, all but $351,000 has been paid or is expected to be paid by HHS.

In accordance with Staff Accounting Bulletin No. 104, *Revenue Recognition* ("SAB 104"), and Accounting Research Bulletin No. 43, Chapter 11, Section A, *Government Contracts*, *Cost-Plus-Fixed-Fee Contracts*, the Company recognizes revenue as reimbursable costs are incurred under the contract with HHS. Based on this guidance, the Company recognized revenue equal to the amount of reimbursable costs (both internal and external) incurred through December 31, 2007, plus the applicable fixed fee.

4. Please clarify for us in your disclosure the accounting for sublicense payments and maintenance payments and your basis of accounting for these payments. Provide the nature of costs deferred and why you believe deferral is appropriate.

RESPONSE:

The Company expenses sublicense payments as incurred unless they are related to revenues that have been deferred, in which case the expenses are deferred and recognized over the related revenue recognition period. The Company expenses maintenance payments as incurred.

The Company's accounting for deferred sublicense payments related to revenues that have been deferred is based on the guidance in SAB 104. SAB 104 states that the incremental direct costs incurred related to the acquisition or origination of a contract in a transaction that results in the deferral of revenue may either be expensed as incurred or accounted for in accordance with paragraph 4 of Financial Accounting Standards Board ("FASB") Technical Bulletin 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Costs* ("FTB 90-1"). At December 31, 2007, the Company had deferred collaboration expenses of approximately $12.3 million. These deferred expenses were sub-license payments, paid to our academic partners upon our receipt of consideration from various commercial partners. These deferred expenses would not have been incurred without receipt of such payments from our commercial partners and are being expensed in proportion to the related revenue being recognized. We believe that this accounting treatment appropriately matches expenses with the associated revenue.

5. Provide the disclosures specified in paragraph 14b of FAS 68 or tell us why they are not required.

RESPONSE:

Of the relationships outlined in Note 10 to the financial statements included in the Company's 2007 Form 10-K, the Company believes that only the contracts with HHS and Mundipharma contain obligations for the Company to perform research and development. The other relationships are license agreements under which the Company has no obligation to perform contractual research and development for others.

FASB Statement No. 68, *Research and Development Arrangements* ("FAS 68"), specifically exempts government contracts from its scope. Accordingly, we do not believe that the disclosure requirements of FAS 68 apply to the HHS contract.

However, the Company recognizes that certain aspects of FAS 68 appear to apply to the relationship between Mundipharma and the Company. In previous filings the Company has included much of the required disclosure in paragraph 14 of FAS 68. The terms of significant agreements under the research and development arrangement with Mundipharma are disclosed in Notes 1 and 10. Furthermore, the amount of revenue recognized related to our contract with Mundipharma also has been disclosed in Note 1. In order to fully satisfy the disclosure requirement, in future filings we also will separately disclose the costs incurred by the Company related to the contract with Mundipharma, which are currently reported in research and development expenses in the statement of operations.

6. It appears that you have not filed as an exhibit to your filing a copy of your agreement with Green Cross Corporation. Please file this agreement as an exhibit to your filing or, alternatively, please provide us with a supplemental analysis supporting your determination that you are not substantially dependent on this agreement.

RESPONSE:

The Company has not filed a copy of the agreement with Green Cross as an exhibit as we do not believe this is a material agreement, nor is the Company substantially dependent on this collaboration. Therefore, we are not required to file a copy of the agreement under Item 601(b)(10) of Regulation S-K. Under the terms of the agreement, which had an effective date of June 12, 2006, Green Cross paid BioCryst a one time license fee of $250,000. Total future milestone payments by Green Cross would be equally modest. Finally, while it is possible that at some point in the future we may receive royalties, we do not believe that those payments will be significant. Therefore, we do not believe that this contract will be of material significance to the Company in the foreseeable future.

7. Please tell us what the impact, if any, of adopting FAS 159 had on your financial statements. Explain why the disclosure of adopting the standard was not warranted.

RESPONSE:

At January 1, 2008, the Company adopted FASB Statement No. 159, *The Fair Value Option for Financial Assets and Liabilities* (“FAS 159”) but did not elect to change the accounting for its financial instruments. Therefore no disclosure regarding FAS 159, was made in the 1Q 2008 and 2Q 2008 Form 10-Qs. In future filings we will disclose that the Company did adopt FAS 159, but did not elect to apply fair value accounting to any financial instruments that were not already accounted for at fair value under existing guidance.

8. You reversed $4.9 million of revenues related to your contract with HHS in the quarter ended June 30, 2008. Please explain why you believed it was appropriate under GAAP to recognize these revenues in an earlier period, that is, why you believed these Phase III costs were reimbursable under the contract. We note in January 2008 you announced that development costs would exceed the amount of the contract and HHS indicated they would fund certain elements of the revised program.

RESPONSE:

The contract we have with HHS requires them to reimburse all costs associated with the development of peramivir, including wind down costs for our Phase III program. As such, all costs have been recorded properly as reimbursable. In January BioCryst announced that the total costs of the peramivir program would exceed the original contract amount of 102.6 million. We have not exceeded the total contract amount.

Also in January, we announced our development plan for peramivir had changed and that HHS would fund certain elements of the revised program. We further announced that HHS would play a more active role in the program and in reviewing related spending under this contract. The Company further disclosed that upon consideration of various factors and several discussions with HHS, the Company would not continue the phase III program. During the last quarter of 2007 and the first quarter of 2008, the Company recorded revenues related to the execution of the phase III program in accordance with the contract with HHS. During the first quarter of 2008, the Company also recorded revenue related to the wind-down costs associated with terminating the phase III program. Under the terms of the HHS contract, the Company believed and continues to believe that these costs are reimbursable by HHS.

At the end of the first quarter, we determined that it was probable that HHS would reimburse us for the costs incurred under the phase III program including reasonable wind down costs and that no reserve against revenue was necessary, as we believed these costs were reimbursable under the contract . However, the Company recognized that some of the costs incurred could be subject to different interpretation by HHS and that it was possible that some portion of the costs would not be reimbursed. Accordingly, the Company disclosed the risk associated with revenue recorded in our Form 10-Q for the quarter ended March 31, 2008.

For the first time, in July 2008, HHS verbally indicated that it did not intend to reimburse the Company for all of the costs incurred related to the terminated Phase III program. Therefore, under FAS 5, the Company determined that it was probable that a loss would occur and the loss could be reasonably estimated. Therefore, during the second quarter of 2008, the Company recorded a reserve against revenue for amounts the Company previously expected to receive from HHS related to the peramivir phase III program. As previously mentioned, the contract with HHS is as a CPFF contract and revenue is recorded as described in Item 3 of this letter.

* * *

The Company acknowledges that it is responsible for the adequacy and accuracy of the disclosure in the filing; staff comments or changes to disclosure in response to staff comments 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.

If you have any questions, please contact our outside corporate counsel, Brian Lane of Gibson, Dunn & Crutcher LLP at (202) 887-3646.

Sincerely,

/s/ Stuart Grant

Stuart Grant
Senior Vice President & Chief Financial Officer

Cc: Jon Stonehouse
Mike Darwin
Alane Barnes
Brian Lane
Mike Mills

EXHIBIT A

Collaboration and In-License Relationships

We seek to enter into collaborations with leading pharmaceutical and biotechnology companies when we feel it is advantageous to leverage these companies' resources to develop and commercialize our drug candidates on a global basis. This allows us to remain focused on our strength of early stage discovery and development of drug candidates. To date, we have two major collaborations for the development and commercialization of our lead PNP inhibitors and two collaborations for the development and commercialization of peramivir in certain countries outside the U.S. In addition, in January 2007, we announced that HHS had awarded the Company a $102.6 million, four-year contract for the advanced development of peramivir for U.S. licensure.

Another important component of our strategy is to augment our internal discovery programs through the selective in-licensing of potential drug development targets or early stage compounds for these specific targets. For example, our PNP inhibitors were in-licensed from AECOM and IRL in June 2000.

Corporate Alliances

Roche. In November 2005, we entered into an exclusive license with Roche for the development and commercialization of our second generation PNP inhibitor, BCX-4208, for the prevention of acute rejection in transplantation and for the treatment of autoimmune diseases. Under the terms of the agreement, Roche obtained worldwide rights to BCX-4208 in exchange for an up-front payment of $30 million, which included a payment as reimbursement for a limited supply of material during the first 24 months of the collaboration. The license also provided for future milestone event payments for achieving specified development, regulatory and commercial milestones (including sales level milestones following a product's launch) for certain indications. In addition, the license provided for the Company to receive royalties based on a percentage of net product sales, which varies depending upon when certain indications receive New Drug Application ("NDA") approval in a major market country and can vary by country depending on the patent coverage or sales of generic compounds in a particular country. We licensed this compound and other PNP inhibitors from AECOM and IRL and will owe sublicense payments to these third parties on any upfront payment, future event payments and royalties received by us for the sublicense of these inhibitors.

Deleted: There could

Deleted: be

Deleted: we will

Roche has a right of first negotiation, under certain conditions, on existing backup PNP inhibitors we develop through Phase IIb in transplant rejection and autoimmune diseases, but any new PNP inhibitors are exempt from this agreement and we retain all rights to such compounds. We retain the right to co-promote BCX-4208 in the U.S. for certain indications. Roche has certain obligations under the terms of the agreement to use commercially reasonable efforts to develop, manufacture and commercialize the licensed product. The agreement may be terminated by either party following an uncured material breach by the other party or may be either fully or partially terminated by Roche without cause under certain conditions and all rights, data, materials, products and other information would be transferred to the Company. For termination without cause, the effective date of termination is 180 days from the date of notice.

Deleted: us at no cos

In May 2008 the Company received notice that Roche was exercising the "no cause" termination right under the license agreement for BCX-4208. Upon termination, the Company will recognize the remaining deferred revenue and deferred expense related to the license agreement, which are $27.3 million and $8.4 million, respectively, as of March 31, 2008.

Mundipharma. In February 2006, the Company entered into an exclusive, royalty bearing right and license in the specified territory (primarily Europe, Asia and Australia) with Mundipharma for the development and commercialization of our lead PNP inhibitor, forodesine HCl, for use in oncology. Under the terms of the agreement, Mundipharma obtained oncology rights to forodesine HCl in the specified territory in exchange for a $10 million up-front payment. Mundipharma will share 50% of the documented third party development costs incurred by us in respect of our current and planned trials as of the effective date of the agreement provided that Mundipharma's maximum contribution to these trials shall be $10 million. In addition, Mundipharma will conduct additional clinical trials at their own cost up to a

Deleted: we

maximum of $15 million. The license provides for possibility of future event payments totaling $155million for achieving specified development, regulatory and commercial events (including certain sales level amounts following a product's launch) for certain indications. In addition, the agreement provides that we will receive royalties based on a percentage of net product sales, which varies depending upon when certain indications receive NDA approval in a major market country and can vary by country depending on the patent coverage or sales of generic compounds in a particular country. Generally, all payments under the agreement are nonrefundable and non-creditable, but they are subject to audit. We licensed this compound and other PNP inhibitors from AECOM and IRL and will owe sublicense payments to these third parties on the upfront payment, future event payments and royalties received by us for the sublicense of these inhibitors.

Within five years of the effective date of the agreement, Mundipharma has a right of first negotiation on existing backup PNP inhibitors we develop through Phase IIb in oncology, but any new PNP inhibitors are exempt from this agreement and we retain all rights to such compounds. We retain the rights to forodesine HCl in the U.S. and Mundipharma is obligated by the terms of the agreement to use commercially reasonable efforts to develop the licensed product in the territory specified by the agreement. The agreement will continue for the commercial life of the licensed products, but may be terminated by either party following an uncured material breach by the other party or in the event the pre-existing third party license with AECOM and IRL expires. It may be terminated by Mundipharma upon 60 days written notice without cause or under certain other conditions as specified in the agreement and all rights, data, materials, products and other information would be transferred to us at no cost. In the event we terminate the agreement for material default or insolvency, we could have to pay Mundipharma 50% of the costs of any independent data owned by Mundipharma in accordance with the terms of the agreement.

Shionogi. In March 2007, the Company entered into an exclusive license agreement with Shionogi to develop and commercialize the Company's lead influenza neuraminidase inhibitor, peramivir, in Japan for the treatment of seasonal and potentially life-threatening human influenza. Under the terms of the agreement, Shionogi obtained rights to injectable formulations of peramivir in Japan in exchange for a $14 million up-front payment. The license provides for potential future milestone event payments (up to $21 million) and commercial event milestone payments (up to $95 million) in addition to double digit (between 10 and 20% range) royalty payments on product sales of peramivir. In December 2007, the Company received a $7 million milestone payment from Shionogi for their initiation of a Phase II clinical trial with i.v. peramivir. Generally, all payments under the agreement are nonrefundable and non-creditable, but they are subject to audit. Shionogi will be responsible for all development, regulatory and marketing costs in Japan. The term of the agreement is from February 28, 2007 until terminated by either party in accordance with the license agreement. Either party may terminate in the event of an uncured breach. Shionogi has the right of without cause termination. In the event of termination all license and rights granted to Shionogi shall terminate and shall revert back to the Company. The Company developed peramivir under a license from UAB and will owe sublicense payments to them on the upfront payment and any future event payments and/or royalties received by the Company from Shionogi. The Company retains all rights to commercialize peramivir in North America, Europe, and other countries outside of Korea and Japan.

Deleted: The license provides for future event payments for achieving specified development, regulatory and commercial events (including certain sales level amounts following a product's launch) for certain indications.

Deleted: In addition, the Company will receive royalties based on a percentage of net product sales.

Green Cross Corporation ("Green Cross"). In June 2006, the Company entered into an agreement with Green Cross to develop and commercialize peramivir in Korea. Under the terms of the agreement, Green Cross will be responsible for all development, regulatory, and commercialization costs in Korea. The Company received a one-time license fee of $250,000. Total future milestone payments would be equally modest. The license also provides that the Company will share in profits resulting from the sale of peramivir in Korea, including the sale of peramivir to the Korean government for stockpiling purposes. Furthermore, Green Cross will pay the Company a premium over its cost to supply peramivir for development and any future marketing of peramivir products in Korea. Both parties have the right to terminate in the event of an uncured material breach. In the event of termination all rights, data, materials, products and other information would be transferred to the Company.

Deleted: and

Deleted: may also receive future event payment

Deleted: s as well as royalties on product sales of peramivir. In addition, the Company will share in any profits resulting from the sale of

Academic Alliances

Albert Einstein College of Medicine of Yeshiva University and Industrial Research, Ltd, New Zealand. In June 2000, we licensed a series of potent inhibitors of FNF from AECOM and IRL. The lead drug candidates from this collaboration are forodesine HCl and BCX-4208. We have obtained worldwide exclusive rights to develop and ultimately distribute these compounds or any other drug candidates that might arise from research on these inhibitors. We have agreed to pay certain milestone payments for future development of these inhibitors, certain royalties on sales of any resulting product, and to share in future payments received from other third-party partners, if any. In addition, we have agreed to pay an annual license fee that is non-refundable, but is creditable against actual royalties and other payments due to AECOM and IRL. This agreement may be terminated by us at any time by giving 60 days advance notice or in the event of material uncured breach by AECOM and/or IRL.

The University of Alabama at Birmingham. We have had a close relationship with UAB since our formation. Our former Chairman, Dr. Charles E. Bugg, was the previous Director of the UAB Center for Macromolecular Crystallography, and our Chief Operating Officer, Dr. J. Claude Bennett, was the former President of UAB, the former Chairman of the Department of Medicine at UAB and a former Chairman of the Department of Microbiology at UAB. Several of our early programs originated at UAB.

We currently have agreements with UAB for influenza neuraminidase and complement inhibitors. Under the terms of these agreements, UAB performed specific research for us in return for research payments and license fees. UAB has granted us certain rights to any discoveries in these areas resulting from research developed by UAB or jointly developed with us. We have agreed to pay royalties on sales of any resulting product and to share in future payments received from other third-party partners. We have completed the research under both the complement and influenza agreements. These two agreements have initial 25-year terms, are automatically renewable for five-year terms throughout the life of the last patent and are terminable by us upon three months notice and by UAB under certain circumstances. Upon termination both parties shall cease using the other parties proprietary and confidential information and materials, the parties shall jointly own joint inventions and UAB shall resume full ownership of all UAB licensed products. There is currently no activity between us and UAB on these agreements, but when the Company licenses this technology, such as in the case of the Shionogi and Green Cross agreements, or commercialize products related to these programs, we will owe sublicense fees or royalties on amounts we receive.

Emory. In June 2000, we licensed intellectual property from Emory related to the HCV polymerase target associated with hepatitis C viral infections. Under the original terms of the agreement, the research investigators from Emory provided us with materials and technical insight into the target. We have agreed to pay Emory royalties on sales of any resulting product and to share in future payments received from other third party partners, if any. We can terminate this agreement at any time by giving 90 days advance notice. Upon termination, Biocryst would cease using the licensed technology.

Government Contracts

In January 2007, we announced that HHS had awarded the Company a $102.6 million, four-year contract for the advanced development of peramivir. In January 2008, we announced the development cost of our peramivir program to product approval would cost in excess of the $102.6 million contract since the development plan for peramivir has changed from that outlined in the original proposal to HHS. HHS has indicated that they will fund certain elements of our revised program, including the ongoing Phase II i.v. study in hospitalized subjects, planning and conduct of the planned Phase II i.m. study, manufacturing and toxicology. Each of these elements has specific HHS funding limits and costs outside the approved amounts by HHS may be the responsibility of the Company. The original contract of $102.6 million and the four year term remain unchanged. HHS has indicated that antiviral drugs are an important element of their pandemic influenza preparedness efforts and that their strategy includes not only stockpiling of existing antiviral drugs but also seeking out new antiviral medications to further broaden their capabilities to treat and prevent all forms of influenza. Peramivir is in the same class of neuraminidase inhibitors as oseltamivir

(Tamiflu) and zanamivir (Relenza), all of which are antiviral drugs, but the method of delivery for peramivir will be parenteral (i.m. and i.v.) as compared to the oral Tamiflu or inhaled Relenza. We are committed to working with HHS for the development of these parenteral formulations of peramivir which could be especially useful in hospital settings or pandemic situations due to the ability to achieve high levels of the drug rapidly throughout the body.

This contract is a cost-plus-fixed-fee contract, which is milestone-driven. HHS will make periodic assessments of progress and the continuation of the contract is based on our performance, timeliness and quality of deliverables, and other factors. The government has rights under certain contract clauses to terminate this contract. The contract is terminable by the government at any time for breach or without cause.