

BioCryst Pharmaceuticals, Inc.
4505 Emperor Blvd., Suite 200
Durham, North Carolina 27703
(919) 859-1302

April 14, 2016

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, DC 20549
Attn: Mary Beth Breslin

Re: *BioCryst Pharmaceuticals, Inc.*
Post-Effective Amendment No. 1 to Registration Statement on Form S-3 Filed February 26, 2016
(File No. 333-202466)

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended, BioCryst Pharmaceuticals, Inc., a Delaware corporation (the "Company"), hereby respectfully requests that the effective time of the above referenced Post-Effective Amendment No. 1 to Registration Statement on Form S-3 filed by the Company (the "Registration Statement") be accelerated to 4:00 p.m., Eastern Daylight Time, on April 18, 2016 or as soon thereafter as practicable.

The Company hereby acknowledges that:

- should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;
 - the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the Registration Statement effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
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· the Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

[Signature page follows]

Very truly yours,

BioCryst Pharmaceuticals, Inc.

/s/ Alane Barnes

Alane Barnes

Vice President, General Counsel and Corporate Secretary

cc: Brian Lane, Gibson, Dunn & Crutcher LLP