Registration No. 333-

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

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

BIOCRYST PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware (State of Incorporation)

4505 Emperor Blvd., Suite 200 Durham, North Carolina (Address of Principal Executive Offices) **62-1413174** (I.R.S. Employer Identification No.)

27703 (Zip Code)

Inducement Equity Incentive Plan (as Amended and Restated as of October 26, 2023) (Full Title of the Plan)

> Jon P. Stonehouse President and Chief Executive Officer BioCryst Pharmaceuticals, Inc. 4505 Emperor Blvd., Suite 200 Durham, North Carolina 27703 (Name and Address of Agent for Service)

> > (919) 859-1302

(Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Brian Lane, Esq. Robyn Zolman, Esq. Gibson, Dunn and Crutcher LLP 1050 Connecticut Ave. N.W. Washington, DC 20036 (202) 955-8500

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \boxtimes Non-accelerated filer \square

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement on Form S-8 (this "Registration Statement") is filed by BioCryst Pharmaceuticals, Inc. (the "Registrant") to register 1,700,000 shares of the Registrant's common stock, par value \$0.01 per share ("Common Stock"), to be offered and sold under the Registrant's Inducement Equity Incentive Plan (as amended and restated as of October 26, 2023), as approved by the Registrant's Board of Directors in October 2023 (the "Inducement Plan"). The shares of Common Stock previously reserved for issuance under the Inducement Plan were registered on the Registrant's Registration Statements on Form S-8 previously filed with the Securities and Exchange Commission on April 29, 2019 (File No. 333-231108), June 10, 2020 (File No. 333-239078), August 12, 2020 (File No. 333-245024), September 30, 2021 (File No. 333-259919), and August 31, 2022 (File No. 333-267193) (collectively, the "Prior Registration Statements"). The information contained in the Prior Registration Statements, together with all exhibits filed therewith or incorporated therein by reference, is hereby incorporated by reference pursuant to General Instruction E to Form S-8, except as amended hereby. The shares of Common Stock registered hereunder are in addition to the shares of Common Stock registration Statements.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

The following exhibits are submitted herewith or incorporated by reference herein.

Exhibit <u>Number</u>	Description
<u>5.1</u>	Opinion of Gibson, Dunn and Crutcher LLP (filed herewith).
<u>23.1</u>	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm (filed herewith).
<u>23.2</u>	Consent of Gibson, Dunn and Crutcher LLP (included in Exhibit 5.1).
<u>24.1</u>	Power of Attorney (included on signature page).
<u>99.1</u>	Inducement Equity Incentive Plan, as amended and restated as of October 26, 2023 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed on November 8, 2023).
<u>107</u>	Filing Fee Table (filed herewith).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Durham, State of North Carolina, on the 8th day of November, 2023.

BIOCRYST PHARMACEUTICALS, INC.

By: /s/ Jon P. Stonehouse

Jon P. Stonehouse President & Chief Executive Officer

POWER OF ATTORNEY

Each of the undersigned officers and directors of BIOCRYST PHARMACEUTICALS, INC. hereby constitutes and appoints Jon P. Stonehouse, Anthony J. Doyle, and Alane P. Barnes, and each of them, as the undersigned's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for the undersigned and in the undersigned's name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or any of their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities indicated on November 8, 2023.

Signature	Title				
/s/ Jon P. Stonehouse Jon P. Stonehouse	President, Chief Executive Officer and Director (Principal Executive Officer)				
/s/ Anthony J. Doyle Anthony J. Doyle	Chief Financial Officer (Principal Financial Officer and Interim Principal Accounting Officer)				
/s/ George B. Abercrombie George B. Abercrombie	Director				
/s/ Stephen J. Aselage Stephen J. Aselage	Director				
/s/ Steven K. Galson, M.D. Steven K. Galson, M.D.	Director				
/s/ Theresa M. Heggie Theresa M. Heggie	Director				
/s/ Nancy J. Hutson, Ph.D. Nancy J. Hutson, Ph.D.	Director				
/s/ Kenneth B. Lee, Jr. Kenneth B. Lee, Jr.	Director				
/s/ Alan G. Levin Alan G. Levin	Director				

/s/ Amy E. McKee, M.D. Amy E. McKee, M.D.

/s/ Vincent J. Milano Vincent J. Milano

/s/ Machelle Sanders Machelle Sanders

Director

Director

Director

GIBSON DUNN

Gibson, Dunn & Crutcher LLP

200 Park Avenue New York, NY 10166-0193 Tel 212.351.4000 www.gibsondunn.com

November 8, 2023

BioCryst Pharmaceuticals, Inc. 4505 Emperor Blvd., Suite 200 Durham, North Carolina 27703

Re: BioCryst Pharmaceuticals, Inc. Registration Statement on Form S-8

Ladies and Gentlemen:

We have examined the Registration Statement on Form S-8 (the "Registration Statement") of BioCryst Pharmaceuticals, Inc., a Delaware corporation (the "Company"), filed with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), in connection with the offering by the Company of up to 1,700,000 shares of the Company's common stock, par value \$0.01 per share ("Common Stock"), issuable pursuant to the Company's Inducement Equity Incentive Plan (as amended and restated October 26, 2023, the "Plan," and such shares, the "Shares").

In arriving at the opinion expressed below, we have examined originals, or copies certified or otherwise identified to our satisfaction as being true and complete copies of the originals, of specimen Common Stock certificates and such other documents, corporate records, certificates of officers of the Company and of public officials and other instruments as we have deemed necessary or advisable to enable us to render this opinion. In our examination, we have assumed without independent investigation the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies. As to any facts material to this opinion, we have relied to the extent we deemed appropriate and without independent investigation upon statements and representations of officers and other representatives of the Company and others. We have also assumed without independent investigation that there are no agreements or understandings between or among the Company and any participants in the Plan that would expand, modify, or otherwise affect the terms of the Plan or the respective rights or obligations of the participants thereunder.

Based on the foregoing and in reliance thereon, and subject to the assumptions, exceptions, qualifications and limitations set forth herein, we are of the opinion that the Shares, when issued against payment therefor in accordance with the terms set forth in the Plan, will be validly issued, fully paid and non-assessable.

Abu Dhabi – Beijing – Brussels – Century City – Dallas – Denver – Dubai – Frankfurt – Hong Kong – Houston – London – Los Angeles Munich – New York – Orange County – Palo Alto – Paris – San Francisco – Singapore – Washington, D.C.

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BioCryst Pharmaceuticals, Inc. November 8, 2023 Page 2

The opinion expressed above is subject to the following exceptions, qualifications, limitations and assumptions:

A. We render no opinion herein as to matters involving the laws of any jurisdiction other than the Delaware General Corporation Law ("DGCL"). This opinion is limited to the effect of the current state of the DGCL and the facts as they currently exist. We assume no obligation to revise or supplement this opinion in the event of future changes in such laws or the interpretation thereof or such facts. We express no opinion regarding any state securities laws or regulations.

We consent to the filing of this opinion as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the Rules and Regulations of the Commission.

Very truly yours,

/s/ Gibson, Dunn & Crutcher LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Inducement Equity Incentive Plan (as Amended and Restated as of October 26, 2023) of BioCryst Pharmaceuticals, Inc. of our reports dated February 27, 2023, with respect to the consolidated financial statements of BioCryst Pharmaceuticals, Inc. and the effectiveness of internal control over financial reporting of BioCryst Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2022, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Raleigh, North Carolina November 8, 2023

Calculation of Filing Fee Table

Form S-8 (Form Type)

BIOCRYST PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security	Fee Calculation	Amount Registered (1)	Proposed	Maximum	Fee Rate	Amount of Registration
	Class Title	Rule		Maximum	Aggregate		Fee
				Offering Price Per	Offering		
				Share (2)	Price (2)		
Equity	Common Stock,	Other (2)	1,700,000 (3)	\$5.57	\$9,469,000.00	\$0.0001476	\$1,397.62
	\$0.01 par value						
Total Offering Amounts					\$9,469,000.00		\$1,397.62
Total Fee Offsets							_
Net Fee Due							\$1,397.62

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of Common Stock which become issuable by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of Common Stock.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rules 457(c) and 457(h) under the Securities Act, based on the average of the high and low prices of the Registrant's Common Stock on November 2, 2023, as reported on The Nasdaq Global Select Market.

(3) Increase in authorized number of shares under the Inducement Equity Incentive Plan (as amended and restated as of October 26, 2023), as approved by the Registrant's Board of Directors in October 2023.