

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

BIOCRYS T PHARMACEUTICALS, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware
(State of Incorporation)

62-1413174
(I.R.S. Employer Identification No.)

2190 Parkway Lake Drive
Birmingham, Alabama 35244
(Address of Principal Executive Offices)

Stock Incentive Plan
(Amendment and Restatement of 1991 Stock Option Plan)
(Full Title of the Plan)

Charles E. Bugg, Ph.D.
Chairman and Chief Executive Officer
BioCryst Pharmaceuticals, Inc.
2190 Parkway Lake Drive
Birmingham, Alabama 35244
(205) 444-4600
(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

Copies to:
Richard R. Plumridge, Esq.
Jennifer A. D'Alessandro, Esq.
Holme Roberts & Owen LLP
1700 Lincoln Street, Suite 4100
Denver, CO 80203
(303) 861-7000

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (3)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee (4)
Common Stock, \$0.01 par value	1,500,000(2) \$	8.815 \$	13,222,500 \$	1,414.81

- (1) 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) Increase in authorized number of shares under the amended and restated Stock Incentive Plan above those previously covered by the 1991 Stock Option Plan.
- (3) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h) under the Securities Act of 1933, as amended, based upon the average of the high and low prices of the Registrant's Common Stock on August 16, 2006, as reported on The Nasdaq National Market.
- (4) The registration fee for the securities registered hereby was calculated by multiplying the proposed maximum offering price by .000107 in accordance with Section 6(b) of the Securities Act and the related rules.

FORM S-8 PURSUANT TO GENERAL INSTRUCTION E

This Form S-8 is filed with the Securities and Exchange Commission (the "Commission") pursuant to General Instruction E to Form S-8. The contents of the earlier Registration Statements on Form S-8, Registration Nos. 333-120345, 333-39484 and 333-30751 are hereby incorporated by reference into this Form S-8. All capitalized terms not defined herein shall have the same meaning as set forth in the Form S-8.

EXHIBITS

Exhibit Number	Description
5.1	Opinion of Holme Roberts & Owen LLP (filed herewith).
10.1	Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006 (File No. 000-23186)).
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm. (filed herewith)
23.2	Consent of Holme Roberts & Owen LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on signature page).

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 Birmingham, State of Alabama, on the 17th day of August, 2006.

BIOCRYST PHARMACEUTICALS, INC.

By: /s/ Charles E. Bugg, Ph.D.

Chairman and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of BIOCRYST PHARMACEUTICALS, INC. hereby constitute and appoint Charles E. Bugg, Ph.D. and Michael A. Darwin, and each of them, as our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for us and in our 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 we might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, 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 and on the dates indicated.

Signature	Title	Date
<u>/s/ Charles E. Bugg</u> Charles E. Bugg, Ph.D.	Chairman, Chief Executive Officer and Director (Principal Executive Officer)	August 17, 2006
<u>/s/ J. Claude Bennett</u> J. Claude Bennett, M.D.	President, Chief Operating Officer, Medical Director and Director	August 17, 2006
<u>/s/ Michael A. Darwin</u> Michael A. Darwin	Chief Financial Officer, Secretary and Treasurer (Principal Financial and Accounting Officer)	August 17, 2006
<u>/s/ Stephen R. Biggar</u> Stephen R. Biggar, M.D., Ph.D.	Director	August 17, 2006
<u>/s/ William W. Featheringill</u> William W. Featheringill	Director	August 17, 2006
<u>/s/ Carl L. Gordon</u> Carl L. Gordon, CFA, Ph.D.	Director	August 17, 2006
<u>/s/ John L. Higgins</u> John L. Higgins	Director	August 17, 2006
<u>/s/ Zola P. Horovitz</u> Zola P. Horovitz, Ph.D.	Director	August 17, 2006
<u>/s/ Joseph H. Sherrill, Jr.</u> Joseph H. Sherrill, Jr.	Director	August 17, 2006
<u>/s/ Beth C. Seidenberg</u> Beth C. Seidenberg, M.D.	Director	August 17, 2006
<u>/s/ William M. Spencer, III</u> William M. Spencer, III	Director	August 17, 2006
<u>/s/ Randolph C. Steer</u> Randolph C. Steer, M.D., Ph.D.	Director	August 17, 2006

LETTERHEAD OF HOLME ROBERTS & OWEN LLP

August 17, 2006

BioCryst Pharmaceuticals, Inc.
2190 Parkway Lake Drive
Birmingham, AL 35244

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

Ladies and Gentlemen:

We have acted as counsel to BioCryst Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the Company's Registration Statement on Form S-8 (the "Registration Statement") filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933 (as amended, the "Act"), on August 17, 2006. The Registration Statement covers the offering and issuance from time to time by the Company of the following shares of its common stock, par value \$0.01 per share (the "Common Stock"): (i) up to 1,500,000 shares of Common Stock (the "Shares") issuable under the company's Stock Incentive Plan, as amended and restated effective March 7, 2006 (the "Plan").

All capitalized terms which are not defined herein shall have the meanings assigned to them in the Registration Statement.

This opinion is being furnished in accordance with the requirements of Item 8 of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

In connection with the Company's preparation and filing of the Registration Statement, we have examined originals or copies of all documents, corporate records or other writings that we consider relevant for the purposes of this opinion. In such examination, we have assumed the genuineness of all signatures on all original documents, the authenticity of all documents submitted to us as originals, and the conformity to original documents of all documents submitted to us as photocopies of originals. As to matters of fact not directly within our actual knowledge, we have relied upon certificates, electronic and other documents from public officials in certain jurisdictions.

In connection with this opinion, we have examined the following documents:

The Certificate of Incorporation of the Company, as amended to date;

The Bylaws of the Company, as amended to date;

The Plan as adopted by the Company and approved by the stockholders of the Company;

The Registration Statement, together with Exhibits filed as a part thereto and incorporated therein by reference;

Such records of the corporate proceedings of the Company, and such other documents that we considered necessary or appropriate for the purpose of rendering this opinion; and

Such other certificates and assurances from public officials, officers and representatives of the Company that we considered necessary or appropriate for the purpose of rendering this opinion.

On the basis of the foregoing examination, and in reliance thereon, we are of the opinion that (subject to compliance with the pertinent provisions of the Act and to compliance with such securities or "blue sky" laws of any jurisdiction as may be applicable):

The Shares shall have been duly authorized and, when issued and sold in accordance with the terms of the Plan, its implementing documents, and in the manner and for the consideration stated in the Registration Statement and the Prospectus, the Shares will be validly issued, fully paid and nonassessable.

The opinions expressed herein are limited to the General Corporation Law of the State of Delaware (including the statutory provisions and all applicable provisions of the Delaware Constitution and reported judicial decisions implementing these laws) and the federal laws of the United States of America.

This opinion may be filed as an exhibit to the Registration Statement. In giving this consent, we do not admit we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the SEC promulgated thereunder.

The opinions expressed herein are rendered as of the date hereof. We do not undertake to advise you of matters that may come to our attention subsequent to the date hereof and that may affect the opinions expressed herein, including without limitation, future changes in applicable law. This letter is our opinion as to certain legal conclusions as specifically set forth herein and is not and should not be deemed to be a representation or opinion as to any factual matters.

Very truly yours,

/s/ HOLME ROBERTS & OWEN LLP

**CONSENT OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement (Form S-8) of BioCryst Pharmaceuticals, Inc. pertaining to the Stock Incentive Plan (Amendment and Restatement of 1991 Stock Option Plan) of our reports dated March 8, 2006, with respect to: (1) the financial statements of BioCryst Pharmaceuticals, Inc.; (2) BioCryst Pharmaceuticals, Inc. management's assessment of the effectiveness of internal control over financial reporting; and (3) the effectiveness of internal control over financial reporting of BioCryst Pharmaceuticals, Inc., included in its Annual Report (Form 10-K), filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Birmingham, Alabama
August 15, 2006