

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

POST-EFFECTIVE AMENDMENT NO. 1  
TO  
FORM S-3  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ONCOGENEX PHARMACEUTICALS, INC.  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of incorporation or organization)

95-4343413  
(I.R.S. Employer Identification Number)

1522 217<sup>th</sup> Place SE, Suite 100  
Bothell, Washington 98021  
(425) 686-1500  
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Stephen Anderson, Chief Financial Officer  
OncoGenex Pharmaceuticals, Inc.  
1522 217<sup>th</sup> Place SE, Suite 100  
Bothell, Washington 98021  
(425) 686-1500  
(Name, address, including zip code, and telephone number, including area code, of agent for service)

From time to time after the effective date of this Registration Statement.  
(Approximate date of commencement of proposed sale to the public)

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

*EXPLANATORY NOTE*

The Registrant is removing from registration, by means of this post-effective amendment to the registration statement, any securities registered under the registration statement that remain unsold.

## 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-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Seattle, State of Washington, on December 4, 2008.

ONCOGENEX PHARMACEUTICALS, INC.

/s/ Stephen Anderson

Stephen Anderson  
Chief Financial Officer and Secretary

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 to the Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| <u>Signature</u>                                    | <u>Title</u>   | <u>Date</u>      |
|---|--|------------------|
| <u>/s/ Scott Cormack</u><br>Scott Cormack           | President, Chief Executive Officer and Director<br>(Principal Executive Officer) | December 4, 2008 |
| <u>/s/ Stephen Anderson</u><br>Stephen Anderson     | Chief Financial Officer<br>(Principal Financial and Accounting Officer)          | December 4, 2008 |
| <u>/s/ Patrick R. Brady</u><br>Patrick R. Brady     | Director   | December 4, 2008 |
| <u>/s/ Michelle G. Burris</u><br>Michelle G. Burris | Director   | December 4, 2008 |
| <u>/s/ Neil Clendeninn</u><br>Neil Clendeninn       | Director   | December 4, 2008 |
| <u>/s/ Michael A. Martino</u><br>Michael A. Martino | Director   | December 4, 2008 |
| <u>/s/ Dwight Winstead</u><br>Dwight Winstead       | Director   | December 4, 2008 |

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