

SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM SB-2 REGISTRATION STATEMENT ON

Form S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TRANSDel PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

2834

*(Primary Standard Industrial
Classification Code number)*

45-0567010

*(I.R.S. Employer
Identification No.)*

**4225 Executive Square, Suite 485
La Jolla, California 92037
(858) 457-5300**

*(Address, including zip code, and telephone number,
including area code, of Registrant's principal executive offices)*

JULIET SINGH, PH.D.

Chief Executive Officer

TRANSDel PHARMACEUTICALS, INC.

**4225 Executive Square, Suite 485
La Jolla, California 92037
(858) 457-5300**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of all communications to:

JOHN T. LOMORO
Chief Financial Officer
Transdel Pharmaceuticals, Inc.
4225 Executive Square, Suite 485
La Jolla, California 92037
(858) 457-5300

JEFFREY C. THACKER
DLA Piper LLP (US)
4365 Executive Drive, Suite 1100
San Diego, California 92121
(858) 638-6728

Approximate date of commencement of proposed sale to the public: No longer applicable because the shares are being removed from registration.

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, 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 post-effective amendment filed pursuant to Rule 462(d) 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.

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. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

DEREGISTRATION OF SECURITIES

On December 7, 2007, Transdel Pharmaceuticals, Inc. (the "Company") filed a Registration Statement with the Securities and Exchange Commission (the "SEC") on Form SB-2 (File No. 333-147930) (the "Registration Statement") to register 4,447,469 shares of the Company's common stock, par value \$0.001 per share (the "Shares") to permit resales of such Shares by selling stockholders, as named in the Registration Statement, who acquired the Shares in connection with various private transactions with the Company. The Registration Statement was declared effective by the SEC on February 8, 2008.

The Company is seeking to deregister all Shares that remain unsold under the Registration Statement as of the date hereof because its obligation to keep the Registration Statement effective pursuant to the terms of its agreement with the selling stockholders has terminated. Pursuant to the undertaking of the Company as required by Item 512(a)(3) of Regulation S-K, the Company is filing this Post-Effective Amendment No. 1 to the Registration Statement to deregister all remaining unsold Shares registered pursuant to the Registration Statement which would have otherwise remained available for sale under the Registration Statement as of the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this amendment to registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of La Jolla, State of California on May 7, 2009.

TRANSDel PHARMACEUTICALS, INC.

By: /s/ Juliet Singh
Juliet Singh, Ph.D.
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this 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/ Juliet Singh</u> Juliet Singh, Ph.D.	President and Chief Executive Officer (<i>Principal Executive Officer</i>) and Chairman of the Board and Director	May 7, 2009
<u>/s/ John T. Lomoro</u> John T. Lomoro	Chief Financial Officer (<i>Principal Financial Officer</i>)	May 7, 2009
<u>/s/ *</u> Jeffrey J. Abrams, M.D., MPH	Director	May 7, 2009
<u>/s/ *</u> Anthony S. Thornley	Director	May 7, 2009
<u>Lynn Swann</u>	Director	

* Signed by Juliet Singh, Ph.D. as attorney-in-fact