	Registration	No.	333-
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SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM S-8

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)		45-0567010 (I.R.S. Employer Identification No.)
	4225 Executive Square, Suite 485	
	La Jolla, CA 92037	. 1. \
(A	ddress of principal executive offices) (Zip c	ode)
Transdel Pha	rmaceuticals, Inc. 2007 Incentive Stock a	nd Awards Plan
	(Full title of the plan)	
	Juliet Singh, Ph.D.	
	President and Chief Executive Officer	
	Transdel Pharmaceuticals, Inc.	
	4225 Executive Square, Suite 485	
	La Jolla, CA 92037	
	<u> </u>	
	(Name and address of agent for service)	

(858) 457-5300

(Telephone number, including area code, of agent for service)

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 o

Accelerated filer o

Non-accelerated filer o

Smaller reporting company \square

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Securities to be registered(1)	Amount to be registered(2)	Proposed maximum offering price per share(3)	Proposed maximum aggregate offering price(3)	Amount of registration fee
Common Stock, (par value \$0.001)	3,000,000	\$0.725	\$2,175,000	\$121.37

- The securities to be registered include options and rights to acquire common stock.
- 2) Pursuant to Rule 416(a), this registration statement also covers any additional securities that may be offered or issued under the Transdel Pharmaceuticals, Inc. 2007 Incentive Stock and Awards Plan by reason of any stock split, stock dividend or other similar transaction effected without the registrant's receipt of consideration that results in an increase in the number of the registrant's outstanding shares of common stock.
- (3) Estimated solely for the purpose of computing the registration fee and calculated in accordance with Rule 457(c) and (h) under the Securities Act of 1933, based upon the average of the bid and asked prices for the registrant's common stock as reported on the OTC Bulletin Board on May 8, 2009.

TABLE OF CONTENTS

PART I
PART II

Item 3. Incorporation of Documents by Reference
Item 4. Description of Securities
Item 5. Interests of Named Experts and Counsel
Item 6. Indemnification of Directors and Officers
Item 7. Exemption From Registration Claimed
Item 8. Exhibits
Item 9. Undertakings
SIGNATURES
EXHIBIT INDEX
EX-5.1

EX-23.2

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be sent or given to employees as specified by Securities and Exchange Commission (the "Commission") Rule 428(b)(1). Such documents need not be filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424. These documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Form S-8 (Part II hereof), taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference

The following documents filed by Transdel Pharmaceuticals, Inc. (the "Company") with the Commission are incorporated herein by reference and made a part hereof.

- (a) the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, which includes audited consolidated financial statements for the Registrant's fiscal year ended December 31, 2008;
- (b) all other reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") since the end of the fiscal year covered by the registrant document referred to in (a) above; and
- (c) the description of the Company's Common Stock contained in the Company's registration statement on Form SB-2, as amended (File No. 333-147930), filed with the Commission on December 7, 2007 under the Securities Act of 1933 (the "Securities Act"), including any amendment or report filed for the purpose if updating such description.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, after the date of this registration statement (the "Registration Statement") and prior to the filing of a post-effective amendment that indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document that is or is deemed to be incorporated by reference herein modifies or supersede such earlier statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part if this Registration Statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

Section 102(b) of the Delaware General Corporation Law authorizes a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to a corporation or its stockholders for monetary damages for breach or alleged breach of the director's "duty of care." While this statute does not change the directors' duty of care, it enables corporations to limit available relief to equitable remedies such as injunction or rescission. The statute has no effect on a director's duty of loyalty or liability for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, illegal payment of

dividends or stock redemptions or repurchases, or for any transaction from which the director derives an improper personal benefit. As permitted by the statute, the Company has adopted provisions under Article VII of our Amended and Restated Certificate of Incorporation which eliminate to the fullest extent permissible under Delaware law the personal liability of its directors to the Company and its stockholders for monetary damages for breach or alleged breach of their duty of care.

Section 145 of the Delaware General Corporation Law provides for the indemnification of officers, directors, employees and agents of a corporation. The Bylaws of the Company provide for indemnification of its directors, officers, employees and agents to the full extent permitted by Delaware law, including those circumstances in which indemnification would otherwise be discretionary under Delaware law. The Company's Bylaws also empower it to enter into indemnification agreements with its directors and officers and to purchase insurance on behalf of any person whom it is required or permitted to indemnify. The Company has entered into agreements with its directors and certain of its officers that require, among other things, the Company to indemnify such persons to the fullest extent permitted under Delaware law against expenses, judgments, fines, settlements and other amounts actually and reasonably incurred (including expenses of certain derivative actions) in connection with any proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was an agent of the Company, provided such person acted in good faith and in a manner reasonably believed to be in the best interests of the Company and its stockholders. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder.

Section 145 of the General Corporation Law of the State of Delaware provides for indemnification in terms sufficiently broad to indemnify such individuals, under certain circumstances, for liabilities (including reimbursement of expenses incurred) arising under the Securities Act.

The Company has obtained liability insurance for the benefit of its directors and officers.

Item 7. Exemption From Registration Claimed

Not applicable.

Item 8. Exhibits

The Exhibit Index immediately preceding the exhibits is incorporated herein by reference.

Item 9. Undertakings

- 1. The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, *however*, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- 2. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- 3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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 San Diego, State of California, on May 12, 2009.

TRANSDEL PHARMACEUTICALS, INC.

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

POWER OF ATTORNEY

The officers and directors of Transdel Pharmaceuticals, Inc. whose signatures appear below, hereby constitute and appoint Juliet Singh, Ph.D. and John T. Lomoro, and each of them, their true and lawful attorneys and agents, with full power of substitution, each with power to act alone, to sign and execute on behalf of the undersigned any amendment or amendments to this registration statement on Form S-8, and each of the undersigned does hereby ratify and confirm all that each of said attorney and agent, or their or his substitutes, shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Juliet Singh Juliet Singh, Ph.D.	President and Chief Executive Officer (<i>Principal Executive Officer</i>) and Chairman of the Board and Director	May 12, 2009
/s/ John T. Lomoro John T. Lomoro	Chief Financial Officer (Principal Financial Officer)	May12, 2009
/s/ Jeffrey J. Abrams Jeffrey J. Abrams, M.D., MPH	Director	May 12, 2009
/s/ Anthony S. Thornley Anthony S. Thornley	Director	May 12, 2009
/s/ Lynn Swann Lynn Swann	Director	May 12, 2009
	5	

EXHIBIT INDEX

Exhibit No.	Description
5.1	Opinion of DLA Piper LLP (US) regarding the legality of the securities being registered (filed herewith).
10.1	2007 Incentive Stock and Awards Plan is incorporated herein by reference to Exhibit 10.11 the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 21, 2007.
10.2	Form of 2007 Incentive Stock Option Agreement (incorporated herein by reference to Exhibit 10.12 the Current Report on Form 8-K of Transdel Pharmaceuticals, Inc. filed with the Securities and Exchange Commission on September 21, 2007).
10.3	Form of 2007 Non-Qualified Stock Option Agreement (incorporated herein by reference to Exhibit 10.13 the Current Report on Form 8-K of Transdel Pharmaceuticals, Inc. filed with the Securities and Exchange Commission on September 21, 2007).
23.1	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
23.2	Consent of Independent Registered Public Accounting Firm (filed herewith).
24.1	Power of Attorney (included on the signature page to this Registration Statement).

May 12, 2009

Transdel Pharmaceuticals, Inc 4225 Executive Square, Suite 485 La Jolla, CA 92037

Ladies and Gentlemen:

We have acted as legal counsel for Transdel Pharmaceuticals, Inc., a Delaware corporation (the "<u>Company</u>"), in connection with a Registration Statement on Form S-8 (the "<u>Registration Statement</u>") under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), for the registration of up to 3,000,000 shares of the Common Stock, \$0.001 par value, of the Company (the "<u>Shares</u>") which may be granted under the Transdel Pharmaceuticals, Inc. 2007 Incentive Stock and Awards Plan (the "<u>Plan</u>").

We have examined all instruments, documents and records which we deemed relevant and necessary for the basis of our opinion hereinafter expressed. In such examination, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals and the conformity to the originals of all documents submitted to us as copies. We are admitted to practice only in the State of California and we express no opinion concerning any law other than the law of the State of California, the corporation laws of the State of Delaware and the federal law of the United States. As to matters of Delaware corporation law, we have based our opinion solely upon our examination of such laws and the rules and regulations of the authorities administering such laws, all as reported in standard, unofficial compilations. We have not obtained opinions of counsel licensed to practice in jurisdictions other than the State of California.

Based on such examination, we are of the opinion that the Shares which may be issued under the Plan are duly authorized and, when issued against receipt of the consideration therefor in accordance with the provisions of the Plan, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement referred to above and the use of our name wherever it appears in said Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act, the rules and regulations of the Securities and Exchange Commission promulgated thereunder or Item 509 of Regulation S-K.

This opinion letter is given to you solely for use in connection with the issuance of the Shares in accordance with the Registration Statement and is not to be relied on for any other purpose. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares or the Registration Statement.

Very truly yours,

/s/ DLA PIPER LLP (US)
DLA PIPER LLP (US)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 18, 2009, relating to the consolidated financial statements of Transdel Pharmaceuticals, Inc. (the "Company") as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the two years in the period ended December 31, 2008 and for the period from July 24, 1998 (date of inception) through December 31, 2008, which report is included in Transdel Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008.

/s/ KMJ CORBIN & COMPANY LLP

Costa Mesa, California May 11, 2009