

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE TO

TENDER OFFER STATEMENT UNDER SECTION 14(d)(1) OR 13(e)(1)
OF THE SECURITIES EXCHANGE ACT OF 1934

THRESHOLD PHARMACEUTICALS, INC.

(Name of Subject Company (Issuer) and Filing Persons (Offeror))

**Certain Options to Purchase Common Stock under the Threshold Pharmaceuticals, Inc.
2004 Amended and Restated Equity Incentive Plan**
(Title of Class of Securities)

885807107

(CUSIP Number of Class of Securities) (Underlying Common Stock)

Harold E. Selick, Ph.D.
Chief Executive Officer
Threshold Pharmaceuticals, Inc.
1300 Seaport Boulevard, Suite 500
Redwood City, California 94063
(650) 474-8200

(Name, address and telephone number of person authorized to receive notices and communications on behalf of filing person.)

Copies to:

Stephen B. Thau
Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304
Telephone: (650) 813-5640
Facsimile: (650) 251-3745

Calculation of Filing Fee

Transaction Valuation*

\$177,954

Amount of Filing Fee**

\$6.99

* Calculated solely for purposes of determining the filing fee. This amount assumes that options to purchase 569,548 shares of common stock of Threshold Pharmaceuticals, Inc., having an aggregate value of \$177,954 as of January 7, 2009, will be exchanged pursuant to this offer. The aggregate value of these options was calculated based on the Black-Scholes option pricing model.

** The amount of the filing fee, calculated in accordance with Rule 0-11(b) of the Securities Exchange Act of 1934, as amended, equals \$39.30 per each \$1.0 million of the value of the transaction, and has been previously transmitted to the Securities and Exchange Commission.

Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: Not applicable.
Form or Registration No.: Not applicable.

Filing party: Not applicable.
Date filed: Not applicable.

Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

third party tender offer subject to Rule 14d-1.

issuer tender offer subject to Rule 13e-4.

going-private transaction subject to Rule 13e-3.

amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer:

Item 1. Summary Term Sheet.

The information set forth under “Summary Term Sheet” in the Option Exchange Program Tender Offer Statement dated January 12, 2009 (the “Offer to Exchange”), attached hereto as Exhibit (a)(2), is incorporated herein by reference.

Item 2. Subject Company Information.

(a) The name of the issuer is Threshold Pharmaceuticals, Inc., a Delaware corporation (the “Company”), the address of its principal executive offices is 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063, and its telephone number is (650) 474-8200.

(b) This Tender Offer Statement on Schedule TO relates to an offer by the Company to Eligible Persons, as defined in the Offer to Exchange, to exchange certain options to purchase shares of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), granted between February 10, 2005 and December 31, 2008 that are currently outstanding (the “Eligible Options”) under the Threshold Pharmaceuticals, Inc. 2004 Amended and Restated Equity Incentive Plan (the “Plan”).

In exchange for the Eligible Options, tendering option holders will receive new options (the “Replacement Options”) to purchase shares of Common Stock. The Replacement Options will be issued under the Plan, upon the terms and subject to the conditions described in the Offer to Exchange and the related Form of Letter of Transmittal attached hereto as Exhibit (a)(4) (the “Letter of Transmittal,” and together with the Offer to Exchange, as they may be amended or supplemented from time to time, the “Offer”). As of January 12, 2009, Eligible Options to purchase 569,548 shares of Common Stock were outstanding under the Plan.

The information set forth in the Offer to Exchange under Section 1 “Eligible Persons,” Section 2 “Number of Options; Expiration Date,” Section 6 “Acceptance of Options for Exchange and Issuance of Replacement Options” and Section 8 “Source and Amount of Consideration; Terms of Replacement Options” is incorporated herein by reference.

(c) The information set forth in the Offer to Exchange under Section 7 “Price Range of Common Stock Underlying the Options” is incorporated herein by reference.

Item 3. Identity and Background of Filing Person.

The Company is the filing person. The information set forth under Item 2(a) above is incorporated herein by reference. The information set forth in the Offer to Exchange under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” is incorporated herein by reference.

Item 4. Terms of the Transaction.

(a) The information set forth in the Offer to Exchange under “Summary of Terms,” Section 1 “Eligible Persons,” Section 2 “Number of Options; Expiration Date,” Section 4 “Procedures for Participating in the Offer,” Section 5 “Withdrawal Rights,” Section 6 “Acceptance of Options for Exchange and Issuance of Replacement Options,” Section 8 “Source and Amount of Consideration; Terms of Replacement Options,” Section 11 “Status of Options Acquired by Us in the Offer; Accounting Consequences of the Offer,” Section 12 “Legal Matters; Regulatory Approvals,” Section 13 “Material U.S. Federal Income Tax Consequences,” Section 14 “Extension of Offer; Termination; Amendment,” and Schedule A “Conditions of the Offer” is incorporated herein by reference.

(b) Members of the Company’s Board of Directors and its executive officers listed under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” of the Offer to Exchange are eligible to participate in the Offer. The information set forth in the Offer to Exchange under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” is incorporated herein by reference.

Item 5. Past Contacts, Transactions, Negotiations and Arrangements.

(c) The information set forth in the Offer to Exchange under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” is incorporated herein by reference. The Plan pursuant to which the Eligible Options have been granted is filed herewith as Exhibit (d)(1) and is incorporated herein by reference.

Item 6. Purposes of the Transaction and Plans or Proposals.

(a) The information set forth in the Offer to Exchange under Section 3 “Purpose of the Offer” is incorporated herein by reference.

(b) The information set forth in the Offer to Exchange under Section 6 “Acceptance of Options for Exchange and Issuance of Replacement Options” and Section 11 “Status of Options Acquired by Us in the Offer; Accounting Consequences of the Offer” is incorporated herein by reference.

(c) Not applicable.

Item 7. Source and Amount of Funds or Other Consideration.

(a) The information set forth in the Offer to Exchange under Section 8 “Source and Amount of Consideration; Terms of Replacement Options” and Section 15 “Fees and Expenses” is incorporated herein by reference.

(b) The information set forth in the Offer to Exchange under Schedule A “Conditions of the Offer” is incorporated herein by reference.

(d) Not applicable.

Item 8. Interest in Securities of the Subject Company.

(a) The information set forth under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” of the Offer to Exchange attached hereto is incorporated herein by reference.

(b) The information set forth under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” of the Offer to Exchange attached hereto is incorporated herein by reference.

Item 9. Person/Assets, Retained, Employed, Compensated or Used.

(a) Not applicable.

Item 10. Financial Statements.

(a) The information set forth in the Offer to Exchange under Section 9 “Information About Threshold Pharmaceuticals, Inc.” and Section 16 “Additional Information,” Item 8 of the Company’s Annual Report on Form 10-K for its fiscal year ended December 31, 2007, filed with the Securities and Exchange Commission on March 12, 2008, and Item 1 of the Company’s Quarterly Reports on Form 10-Q for its fiscal quarters ended March 31, 2008, June 30, 2008 and September 30, 2008, filed with the Securities and Exchange Commission on May 8, 2008, August 7, 2008 and November 6, 2008, respectively, are incorporated herein by reference. Copies of the Annual Report on Form 10-K and Quarterly Reports on Form 10-Q have been included with the Offer to Exchange. A copy of the Annual Report on Form 10-K and Quarterly Reports on Form 10-Q can be accessed electronically on the Securities and Exchange Commission’s website at www.sec.gov.

(b) Not applicable.

Item 11. Additional Information.

(a) The information set forth under Section 10 “Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock” and Section 12 “Legal Matters; Regulatory Approvals” of the Offer to Exchange is incorporated herein by reference.

(b) Not applicable.

Item 12. Exhibits.

(a)(1) Form of Email Accompanying Distribution of the Offer.

(a)(2) Offer to Exchange, dated January 12, 2009.

(a)(3) Question and Answer Document for Employees, Consultants, Directors and Executive Officers of Threshold Pharmaceuticals, Inc.

(a)(4) Form of Letter of Transmittal.

(a)(5) Form of Email Confirmation of Receipt of Letter of Transmittal.

(a)(6) Form of Letter of Withdrawal.

(a)(7) Form of Email to Eligible Option Holders.

(a)(8) Form of Email Communication Reporting Results to Tendering Option Holders.

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- (a)(9) Threshold Pharmaceuticals, Inc. Annual Report on Form 10-K for its fiscal year ended December 31, 2007, filed with the Securities and Exchange Commission on March 12, 2008 and incorporated herein by reference.
 - (a)(10) Threshold Pharmaceuticals, Inc. Quarterly Report on Form 10-Q for its quarter ended March 31, 2008, filed with the Securities and Exchange Commission on May 8, 2008 and incorporated herein by reference.
 - (a)(11) Threshold Pharmaceuticals, Inc. Quarterly Report on Form 10-Q for its quarter ended June 30, 2008, filed with the Securities and Exchange Commission on August 7, 2008 and incorporated herein by reference.
 - (a)(12) Threshold Pharmaceuticals, Inc. Quarterly Report on Form 10-Q for its quarter ended September 30, 2008, filed with the Securities and Exchange Commission on November 6, 2008 and incorporated herein by reference.
 - (a)(13) Form of Email to Eligible Option Holders dated January 12, 2009.
 - (b) Not applicable.
 - (d)(1) Threshold Pharmaceuticals, Inc. 2004 Amended and Restated Equity Incentive Plan and form of Option Agreement thereunder, filed as Exhibit 10.20 to Threshold Pharmaceuticals, Inc. Current Report on Form 8-K filed with the Securities and Exchange Commission on May 24, 2005 and incorporated herein by reference.
 - (g) Not applicable.
 - (h) Not applicable.

Item 13. Information Required by Schedule 13E-3.

- (a) Not applicable.

SIGNATURE

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Threshold Pharmaceuticals, Inc.

By: /s/ Joel A. Fernandes

Joel A. Fernandes
Senior Director, Finance and Controller
(Principal Accounting and Financial Officer)

Date: January 12, 2009

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- (g) Not applicable.
- (h) Not applicable.

January 12, 2009

To: Affected Threshold Employees, Consultants, Executive Officers and Directors

Re: IMPORTANT: Threshold Option Exchange Program

The Board of Directors of Threshold Pharmaceuticals, Inc. has approved a special program called the Threshold Option Exchange Program. As explained in more detail in the attached documents, under this program all Threshold employees, consultants, executive officers and directors will be able to exchange certain existing stock options for new stock options with prices that more closely reflect current market conditions. This program is closely regulated with very specific rules. Therefore, we will hold a meeting on Thursday, January 15 at 1:00 p.m., Pacific Standard Time, to explain the program in detail and to answer any questions (specifics regarding the meeting will follow in the upcoming days). Additional meetings will be scheduled if needed. But in the interim, let me give you an overview of the program:

- The stock option exchange program allows Threshold employees, consultants, executive officers and directors to cancel stock option grants that were granted between February 10, 2005 and December 31, 2008 in exchange for the promise of an equal number of unvested replacement stock option grants;
- If some of your stock options were granted prior to February 9, 2005 or after December 31, 2008, you can participate in the program with only those stock options that were granted between February 9, 2005 and December 31, 2008;
- The program is completely voluntary, so every individual employee, consultant, executive officer or director can choose whether or not he/she wants to participate;
- Each replacement option will be entirely unvested when granted. Each replacement option will vest pro-rata on each monthly anniversary of the grant date such that the replacement option will become fully vested on the later of (a) January 12, 2010 and (b) the same date the current option would have become fully vested had it not been exchanged; and
- Replacement options will be priced at the NASDAQ closing sales price of Threshold common stock on the date the replacement options are granted.

The details on the Threshold Option Exchange Program are in the following documents:

- Offer to Exchange dated January 12, 2009;
- Letter of Transmittal;
- Form of Notice of Withdrawal; and
- Question and Answer Document Regarding the Offer to Exchange.

We urge you to read each of these documents carefully. If you would like additional copies of any of these documents delivered to you, please contact Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, by e-mail at jfernandes@thresholdpharm.com or by telephone at (650) 474-8200.

Please remember that if you decide to take part in the Option Exchange Program, you must fill out and sign the forms included in the package. **Forms must be received by Mr. Fernandes at Threshold's offices in Redwood City by 5:00 p.m., Pacific Standard Time, on February 12, 2009.** If the proper forms are not received by the deadline you will not be able to participate in this program.

I know there are many questions and we will try to answer each and every one of them.

Sincerely,

Harold E. Selick, Chief Executive Officer
on behalf of the Board of Directors and the Threshold Management
Team

THRESHOLD PHARMACEUTICALS, INC.

OPTION EXCHANGE PROGRAM

TENDER OFFER STATEMENT

"OFFER TO EXCHANGE"

**Offer to exchange certain options issued under the 2004 Amended and Restated Equity Incentive Plan
for an equal number of new options (the "Offer")**

The Offer and withdrawal rights expire at 5:00 p.m., Pacific Standard Time, on February 12, 2009,

unless the Offer is extended by Threshold Pharmaceuticals, Inc.

Offer. Threshold Pharmaceuticals, Inc. (referred to herein as "Threshold," "we," "us" or the "Company") is offering eligible employees, consultants, executive officers and directors the opportunity to make a one-time election to cancel certain outstanding grants of stock options (the "Current Options") under the Threshold Pharmaceuticals, Inc. 2004 Amended and Restated Equity Incentive Plan (the "Plan") for an equal number of new unvested options (the "Replacement Options") to be granted under the Plan after the date of cancellation of the Current Options. We are making the Offer upon the terms and subject to the conditions described in this Option Exchange Program Tender Offer Statement (this "Offer to Exchange"). We currently expect to grant the Replacement Options on or about Monday, February 16, 2009. Participation in the Offer is voluntary. You are not required to accept the Offer. To participate in the Offer, an Eligible Person (as defined below) must cancel all eligible unexercised options within a single option grant and must properly tender Current Options prior to 5:00 p.m., Pacific Standard Time, on Thursday, February 12, 2009 unless we extend the period of time the Offer is open (the "Expiration Date").

Eligible Persons. The Offer is open to all of Threshold's existing employees, consultants, executive officers and directors as of January 12, 2009 (the "Eligible Persons"). To receive Replacement Options, a participant in the Offer must also be employed by or providing services to Threshold on the date the Replacement Options are granted.

Termination of Employment. Eligible Persons who terminate employment with, or services to, Threshold for any reason, whether voluntarily or involuntarily, prior to the Expiration Date, will automatically have their tender withdrawn and will not receive any Replacement Options in exchange for Current Options. Eligible Persons who terminate employment for any reason, whether voluntarily or involuntarily, after the Expiration Date and prior to the date on which Replacement Options are granted will not receive a grant of Replacement Options or any other consideration or payment for the cancellation of their Current Options.

Offering Period. Eligible Persons will be given at least twenty (20) U.S. business days during which to accept the Offer (the "Offering Period"). The Offering Period begins on January 12, 2009 and we currently expect it to end at 5:00 p.m., Pacific Standard Time, on Thursday, February 12, 2009.

Current Options Eligible for Exchange. To be eligible for the Offer, Current Options must (a) be held by an Eligible Person and (b) have been granted between February 10, 2005 and December 31, 2008.

Cancellation Date. If an Eligible Person properly tenders some or all of his or her eligible Current Options for exchange and we accept his or her tender, the Eligible Person's tendered Current Options will be cancelled on or about the first business day following the Expiration Date (the "Cancellation Date"). The Offering Period is presently scheduled to expire on Thursday, February 12, 2009, and we expect the Cancellation Date to be Friday, February 13, 2009.

Grant Date. The Replacement Options will be granted on a date promptly after the Cancellation Date (the "Grant Date"). Assuming we do not extend the Expiration Date, we presently expect the Grant Date to be on or about Monday, February 16, 2009.

Number of Shares Subject to Replacement Options. The number of shares subject to a Replacement Option will be the same number of shares of common stock that an Eligible Person tendered pursuant to a Current Option. For example, if an Eligible Person exchanges a partially vested Current Option with respect to 1,000 shares of common stock, the Current Option will be replaced with an unvested Replacement Option to acquire 1,000 shares of common stock.

Exercise Price of Replacement Options. All Replacement Options will be granted with an exercise price equal to the closing sale price of our common stock on the Grant Date. There is no guarantee that the exercise price of the Replacement Options will be less than the exercise price of the Current Options.

Vesting of Replacement Options. Each Replacement Option, including Replacement Options issued in exchange for Current Options that are fully vested as of the Cancellation Date, will be entirely unvested on the Grant Date. Each Replacement Option will vest pro-rata on a monthly basis such that each Replacement Option will be fully vested on the later of (a) January 12, 2010 and (b) the same date as the Current Option would have become fully vested had it not been exchanged, subject to the Eligible Person's continued service with the Company.

Example: Assume an Eligible Person tenders a partially vested Current Option to purchase 10,000 shares of Threshold common stock that, in accordance with its original vesting schedule, would have become fully vested on March 1, 2012. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on March 1, 2012, all 10,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

Example: Assume an Eligible Person tenders a fully vested Current Option to purchase 8,000 shares of Threshold common stock. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on January 12, 2010, all 8,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

Term of Replacement Options. Each Replacement Option will maintain the original term and expiration date of the Current Option which was cancelled in exchange for the Replacement Option. For example, if the Current Option had a ten year term and would have terminated on July 1, 2017, then the Replacement Option will also terminate on July 1, 2017.

Other Terms and Conditions of Replacement Options. Except as set forth herein, the Replacement Options will be governed by the terms and conditions of the Plan and the applicable option agreement.

No Recommendation. Although our Board of Directors has approved the Offer, neither we nor our Board of Directors make any recommendation as to whether you should participate in the Offer. You must make your own decision. **We cannot guarantee that the Replacement Options will have a lower exercise price than the Current Options.**

Recent Trading Price. Our common stock is traded on the NASDAQ Capital Market under the symbol "THLD." On January 9, 2009, the closing sales price of our common stock on the NASDAQ Capital Market was \$0.79. We recommend that you obtain current market quotations for our common stock before deciding whether to tender your Current Options. See "The Offer," Section 7.

How to Obtain More Information. You should direct questions about the Offer or requests for assistance to Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, via e-mail, at jfernandes@thresholdpharm.com or by telephone at (650) 474-8200. Please note that a meeting will be held on Thursday, January 15 at 1:00 p.m., Pacific Standard Time, at Threshold's principal executive offices located at 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 to answer any outstanding questions you may have about the Offer or these materials.

The Offer is not conditioned upon a minimum aggregate number of options being tendered for exchange. This Offer is subject to certain terms and conditions set forth in this Offer to Exchange.

The Offer has not been approved or disapproved by the U.S. Securities and Exchange Commission or any state or non-U.S. securities commission nor has the U.S. Securities Exchange Commission or any state or non-U.S. securities commission passed upon the fairness or merits of this transaction or upon the accuracy or adequacy of the information contained in this Offer to Exchange. Any representation to the contrary is a criminal offense.

IMPORTANT

HOW TO TENDER YOU CURRENT OPTIONS

If you wish to tender your Current Options for exchange, you must complete and sign the letter of transmittal (as attached to this Offer to Exchange) in accordance with its instructions, and mail, fax or otherwise deliver it and any other required documents to us at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller), facsimile no. (650) 474-2529. Note that delivery by e-mail will not be accepted. We must receive all of the required documents in Redwood City, California by 5:00 p.m., Pacific Standard Time, on February 12, 2009, unless the Offer is extended. **Late forms will not be accepted.**

The decision to participate in the Offer is an individual one that should be based on a variety of factors, and you should consult with your own personal advisors if you have any questions about your legal, financial or tax situation.

We have not authorized any person to make any recommendation on our behalf as to whether you should participate in the Offer. You should rely only on the information contained in this document or other information to which we have referred you. We have not authorized anyone to give you any information or to make any representation in connection with the Offer other than the information contained in this document or other information to which we have referred you. If any other person makes any recommendation or representation to you or gives you any information, you must not rely upon that recommendation, representation or information as having been authorized by us.

Nothing in this document shall be construed to give any person the right to remain in the employ of Threshold or to affect the right of Threshold to terminate the employment or service of any person, at any time, with or without cause, to the extent permitted under applicable law. Nothing in this document should be considered as a contract or guarantee of wages, compensation or severance payments.

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I. SUMMARY TERM SHEET

The following are answers to some of the questions you may have about the Option Exchange Program. We urge you to read carefully the Offer to Exchange because the information in this summary is not complete, and additional important information is contained in the Offer to Exchange. We have included section references to the Offer to Exchange where you can find a more complete description of the topics in this summary. We also urge you to review the information in our annual report on Form 10-K for the year ended December 31, 2008 and our quarterly reports on Form 10-Q for 2008, copies of which are included with this Offer to Exchange, and the proxy statement distributed in connection with our Annual Stockholder Meeting held on May 13, 2008, as these documents contain important financial information and other relevant information about us. The proxy statement may be obtained without charge from us or from the Securities and Exchange Commission ("SEC"). See "The Offer: Section 16, Additional Information."

1. What Is the Option Exchange Program?

The Option Exchange Program (sometimes referred to herein as the "Offer") is a voluntary program that offers eligible employees, consultants, executive officers and directors of Threshold the opportunity to make a one-time election to cancel certain outstanding stock options (the "Current Options") under the Threshold Pharmaceuticals, Inc. 2004 Amended and Restated Equity Incentive Plan (the "Plan") and exchange them for an equal number of new unvested stock options (the "Replacement Options") at a new exercise price. The Replacement Options will have a new vesting schedule, thus requiring employees, consultants and executive officers to continue their employment with, or service to, us to realize any benefit from the Replacement Options. The period during which you may determine whether to accept our offer to participate in the program (the "Offering Period") will open on January 12, 2009, and will close at 5:00 p.m. Pacific Standard Time on February 12, 2009 (the "Expiration Date"), unless the Offering Period is extended. If you decide to participate in the Offer and your tender is accepted by us, your Current Options tendered for exchange will be cancelled on the first business day following the Expiration Date (the "Cancellation Date"). The Replacement Options will be granted on or about the date after the Cancellation Date (the "Grant Date"). Assuming we do not extend the Expiration Date, we currently expect the Grant Date to be on or about February 16, 2009.

2. Why Are We Implementing the Program?

Our Board of Directors approved this program to increase the motivational and retention value of our stock option program and to decrease the potentially dilutive effect that would be created by the issuance of new options to employees, consultants, executive officers and directors with exercise prices at current fair values in addition to existing options that have exercise prices substantially above the current market price of our common stock. (See Section 3 of Part II of this Offer to Exchange.)

3. Do I Have to Participate in the Program?

No, the program is strictly voluntary. Eligible employees, consultants, executive officers and directors have a window of at least twenty (20) U.S. business days in which to decide whether to participate in the Offer. For purposes of the Offer, a "business day" means any day other than a Saturday, Sunday or U.S. federal holiday and consists of the time period from 12:01 a.m. through 12:00 midnight, Eastern Standard Time. The Offering Period begins on January 12, 2009, and we currently anticipate that it will close at 5:00 p.m. Pacific Standard Time on February 12, 2009.

4. Who is Eligible to Participate?

We are offering the Option Exchange Program to all of our existing employees, consultants, executive officers and directors who, as of the start of the Offering Period, hold eligible stock options, whether vested or unvested ("Eligible Persons"). (See Section 1 of Part II of this Offer to Exchange.)

Additionally, an employee, consultant, executive officer or director who tenders his or her options for exchange will receive Replacement Options in exchange only if he or she is employed by us, or is providing service to us, on the date that the Replacement Options are granted.

5. What Securities Are We Offering to Exchange?

We are offering to exchange any outstanding, unexercised options to purchase shares of our common stock granted between February 10, 2005 and December 31, 2008 under the Plan, whether vested or unvested, and held by Eligible Persons. (See Section 2 of Part II of this Offer to Exchange.)

6. If I Elect to Participate, Must I Exchange All of My Eligible Outstanding Options?

No. Eligible Persons may elect to exchange, on a grant-by-grant basis, eligible options as they like. However, Eligible Persons may not partially tender an individual option grant. (See Section 2 of Part II of this Offer to Exchange.)

7. May I Tender Options that I Received in Connection with the 2006 Option Exchange Program?

Yes. You may tender any options that you may have received on or about September 27, 2006 in connection the prior option exchange program, so long as these options are otherwise eligible to be tendered in the Offer.

8. Will the Company Offer a Similar Option Exchange Program in the Future?

There can be no assurance that the Company will offer another option exchange program in the future.

9. May I Tender Options that I Have Already Exercised?

No. The Offer only pertains to unexercised, outstanding options and does not in any way apply to shares purchased, whether upon the exercise of options or otherwise. If you have exercised an option in its entirety, that option is no longer outstanding and is therefore not subject to the Offer. If you have exercised a Current Option in part, the remaining unexercised portion of that option is outstanding and may be tendered for exchange pursuant to the Offer. (See Section 2 of Part II of this Offer to Exchange.)

10. How Can I Find Out the Details of My Options that are Eligible for the Offer?

If you haven't already, you will soon receive a personal stock option statement from Threshold detailing your outstanding options that are eligible for the Option Exchange Program.

11. What if I Quit or Am Terminated Prior to the End of the Offering Period?

If you are not employed by, or providing services to, Threshold on the Expiration Date, you will not be an Eligible Person and, as a result, you will not be eligible to participate in the Offer. If you tender your Current Options prior to the effective date of your termination (but prior to the end of the Offering Period), your tender will be automatically withdrawn. You may exercise your Current Options in accordance with their terms to the extent they are vested. Since your tendered Current Options will automatically be withdrawn, you will not receive any Replacement Options in exchange for your Current Options.

12. What if I Quit or Am Terminated After the Expiration of the Offering Period but Prior to the Grant of the Replacement Options?

If, after the expiration of the Offering Period but prior to the grant of the Replacement Options, you cease to be an employee, consultant, executive officer or director of Threshold, you will not receive any Replacement Options or any other payment or consideration in exchange for your tendered Current Options that have been accepted for exchange and cancelled. This rule applies regardless of the reason for your termination of employment - *i.e.*, whether it is a result of voluntary resignation, involuntary termination, retirement, death or disability. (See Section 6 of Part II of this Offer to Exchange.)

13. What if I Am on a Leave of Absence During the Offering Period or Any Time Prior to the Time That the Replacement Options Are Granted?

Employees, consultants, executive officers and directors who are on authorized leaves of absence will have the same opportunity to participate in the Offer as other employees, consultants, executive officers and directors. However, if you are on a leave at any point in the process, you will need to keep Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, informed as to how best to contact you (*e.g.*, e-mail, U.S. mail) so that notices regarding the Offer will reach you in a timely fashion. Please note that if you elect to participate in the Offer and your employment with or service to Threshold terminates at any time after the end of the Offering Period, but prior to the grant of Replacement Options, you will forfeit any options that you sought to exchange and you will not receive Replacement Options. Generally speaking, you will have the standard ninety (90) days following termination to exercise any vested options that you did not elect to exchange.

14. What if I Change My Country of Residence During the Offering Period or Prior to the Time That the Replacement Options Are Granted?

If, during the Offering Period, you change your place of residence to a country other than the United States, your tender will automatically be withdrawn if the Company determines that the application of local rules would prohibit or make impractical the grant of Replacement Options. In the event your tendered Current Options are automatically withdrawn, you will not receive any Replacement Options in exchange for your Current Options. (See Section 3 of Part II of this Offer to Exchange.)

If, after the expiration of the Offering Period but prior to the grant of the Replacement Options, you change your place of residence to a country other than the United States, you may not have a right to any Replacement Options that would have been granted to you on the Grant Date and you will not have a right to any stock options that were previously cancelled. In some countries other than the United

States, the application of local rules may prohibit or make impractical the grant of Replacement Options. The Company will determine, in its sole discretion, whether or not you reside in a non-U.S. jurisdiction where the application of local rules prohibit or make impractical the grant of Replacement Options. (See Section 6 of Part II of this Offer to Exchange.)

15. How Many Replacement Options Will I Receive in Exchange for My Current Options?

The number of shares subject to a Replacement Option will be the same number of shares of common stock that you tendered pursuant to a Current Option. For example, if you exchange a partially vested Current Option with respect to 1,000 shares of common stock, the Current Option will be replaced with an unvested Replacement Option to acquire 1,000 shares of common stock. (See Section 2 of Part II of this Offer to Exchange.)

16. What Happens if I Choose Not to Participate in the Offer?

If you choose not to tender any of your Current Options for exchange, your Current Options will remain outstanding and retain their current exercise prices and other current terms.

17. When Will I Receive My Replacement Options?

We will grant the Replacement Options promptly after the date we cancel the Current Options accepted for exchange. If we cancel the tendered Current Options on Friday, February 13, 2009, which is the date we currently anticipate, we expect the Replacement Options will be granted on or about Monday, February 16, 2009. **You must continue to be an Eligible Person of Threshold on the Grant Date to be eligible to receive the Replacement Options.** (See Section 6 of Part II of this Offer to Exchange.)

18. What Will the Exercise Price of the Replacement Options Be?

The Replacement Options will have an exercise price equal to the closing sales price of our common stock on the Grant Date. **The Replacement Options may have a higher exercise price than some or all of your Current Options that are cancelled.** (See Section 8 of Part II of this Offer to Exchange.)

19. When Will the Replacement Options Vest?

Each Replacement Option, including all Replacement Options issued in exchange for Current Options that are fully vested as of the Cancellation Date, will be entirely unvested on the Grant Date. Each Replacement Option will vest pro-rata on a monthly basis such that each Replacement Option will be fully vested on the later of (a) January 12, 2010 and (b) the same date as the Current Option would have become fully vested had it not been exchanged, subject to the Eligible Person's continued service with the Company.

Example: Assume an Eligible Person tenders a partially vested Current Option to purchase 10,000 shares of Threshold common stock that, in accordance with its original vesting schedule, would have become fully vested on March 1, 2012. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on March 1, 2012, all 10,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

Example: Assume an Eligible Person tenders a fully vested Current Option to purchase 8,000 shares of Threshold common stock. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on January 12, 2010, all 8,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

20. When Will the Replacement Options Expire?

The expiration date, or term, of an option is the length of time during which it may be exercised. Replacement Options will maintain their original term. For example, if you have a Current Option with a ten (10) year term that you elect to exchange and, at the time the Replacement Option is granted, one (1) year has passed since you received the original grant, the Replacement Option will have a term of nine (9) years. (See Section 8 of Part II of this Offer to Exchange.) Of course, as is true for your Current Options, your Replacement Options can terminate earlier in certain circumstances. For example, if your employment or service terminates for other than death or disability, your vested options typically expire after ninety (90) days if they are not exercised prior to that time.

21. Can I Change My Mind After I've Elected to Participate in the Offer and Keep My Current Options?

Although you may withdraw your tendered Current Option prior to the close of the Offering Period (see Question 25), once the Offering Period closes (which we currently anticipate will occur on February 12, 2009), your election to participate is irrevocable. (See Section 5 of Part II of this Offer to Exchange.)

22. Why Can't Threshold Just Grant Me More Options Without My Current Options Being Cancelled?

We strive to balance the need for a competitive compensation package for our employees, consultants, executive officers and directors with the interests of our stockholders. Because of the number of options that we have currently outstanding, a large grant of Replacement Options would be dilutive to our stockholders.

23. Will I Have to Pay Taxes if I Exchange My Current Options?

If you exchange your Current Options for Replacement Options, you will not be required under current U.S. law to recognize income for U.S. Federal income tax purposes at the time of the tender or upon our acceptance and cancellation of the Current Options. We believe that the exchange will be treated as a non-taxable exchange in the U.S. Further, at the Grant Date of the Replacement Options, we believe that you will not be required under current U.S. law to recognize income for U.S. Federal income tax purposes. (See Section 13 of Part II of this Offer to Exchange.)

However, all Eligible Persons should consult with their own personal tax advisor regarding their personal situation before deciding whether to participate in the Option Exchange Program.

24. What Happens if Threshold Merges Into or Is Acquired By Another Company?

If we merge into or are acquired by another company prior to the end of the Offering Period, you may withdraw your tendered Current Options and retain all the rights afforded you to acquire our common stock under the existing option agreements evidencing those options. If a merger or similar agreement is effective after the grant of the Replacement Options, the Replacement Options will be subject to the change of control provisions under the Plan. The Plan provides that, in the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, all of the shares subject to each outstanding option shall become vested and exercisable, unless the acquiring company assumes or substitutes the outstanding option.

25. When Does the Offer Expire? Can the Offer Be Extended and, If So, How Will I Be Notified if It Is Extended?

We currently expect the Offering Period to expire on February 12, 2009, at 5:00 p.m., Pacific Standard Time, unless we extend the Offering Period. Although we do not currently intend to do so, we may, in our sole discretion, extend the Offering Period at any time. If the Offering Period is extended, we will make an announcement of the extension no later than 9:00 a.m., Pacific Standard Time, on the first business day immediately following the previously scheduled Expiration Date. If the Offering Period is extended, then the Cancellation Date for tendered Current Options accepted for exchange and the Grant Date of the Replacement Options will be delayed. (See Section 2 of Part II of this Offer to Exchange.)

26. What Do I Need to Do If I Want to Participate In the Offer?

To participate in the Offer, you must properly complete, duly execute and deliver to us the letter of transmittal, or a facsimile thereof, along with any other required documents. We must receive all of the required documents at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller) by 5:00 p.m., Pacific Standard Time, on February 12, 2009. **Absolutely no late forms will be accepted.** (See Section 4 of Part II of this Offer to Exchange.)

THE METHOD OF DELIVERY OF ALL DOCUMENTS IS AT THE ELECTION AND RISK OF THE TENDERING OPTION HOLDER. IF DELIVERY IS BY MAIL, WE RECOMMEND THAT YOU USE REGISTERED MAIL WITH RETURN RECEIPT REQUESTED. SINCE THE LETTER OF TRANSMITTAL NEEDS TO BE DULY EXECUTED, ONLY FACSIMILE, MAIL OR HAND DELIVERY, BUT NOT E-MAIL, WILL BE CONSIDERED PROPER DELIVERY. IN ALL CASES, YOU SHOULD ALLOW SUFFICIENT TIME TO ENSURE TIMELY DELIVERY. THE REQUIRED DOCUMENTS MUST BE RECEIVED BY THE EXPIRATION DATE. A POSTMARK PRIOR TO THE EXPIRATION DATE WILL NOT ENSURE TIMELY DELIVERY.

We will strictly enforce the Offer Period. We reserve the right to reject any or all options tendered for exchange that we determine are not in appropriate form or that we determine, in our sole discretion, are unlawful to accept. Subject to our rights to extend, terminate, or amend the Offer, we currently expect that we will accept and subsequently cancel all options properly tendered for exchange.

27. Can I Change My Election (i.e., Withdraw Options That I've Previously Elected to Exchange)?

You can withdraw any options that you previously tendered for exchange at any time before 5:00 p.m., Pacific Standard Time, on February 12, 2009. If we extend the Offering Period beyond that time, you can withdraw your options elected for exchange at any time until the extended Expiration Date. (See Section 5 of Part II of this Offer to Exchange.)

To withdraw options elected for exchange, you must deliver to us a written notice of withdrawal, or a facsimile thereof, with the required information. The notice of withdrawal must specify the name of the option holder who tendered the options to be withdrawn, the grant date, exercise price and total number of option shares subject to each option to be withdrawn. We must receive the notice of withdrawal at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller), before the Expiration Date. Once you have withdrawn options, you can re-elect to exchange eligible Current Options only by again following the delivery procedure described in Question 24 before the Expiration Date.

28. Who Should I Contact if I Have Additional Questions?

We will be conducting one or meetings with Eligible Persons to answer your questions about the Option Exchange Program and address your concerns. We will hold a meeting on Thursday, January 15, 2009 at 1:00 p.m., Pacific Standard Time, at Threshold's principal executive offices located at 1300 Seaport Boulevard, Suite 500, Redwood City, California to explain the program in detail and to answer any questions. Additional meetings will be scheduled if needed.

Otherwise, please direct any questions or requests for additional copies of documents referred to in these materials to Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, by e-mail at jfernandes@thresholdpharm.com or by telephone at (650) 474-8200. Please note, however, that nobody at Threshold, including Mr. Fernandes, can provide you with any advice regarding whether you should participate in the Option Exchange Program.

II. THE OFFER

1. Eligible Persons.

Employees, consultants, executive officers and directors are "Eligible Persons" only if they: (i) are continuously employed by, or providing service to, Threshold on the date the Offering Period begins and ends; (ii) hold at least one eligible option on the date the Offering Period begins; and (iii) remain an employee, consultant, executive officer or director of Threshold through the Grant Date of the Replacement Options.

2. Number of Options; Expiration Date.

Only options granted under the Plan between February 10, 2005 and December 31, 2008 are eligible to be exchanged in the Option Exchange Program. Subject to the terms and conditions of this Offer to Exchange, we will exchange certain Current Options held by Eligible Persons under the Plan for unvested Replacement Options to purchase common stock under the Plan.

If you are eligible and choose to participate, you may elect to exchange, on a grant-by-grant basis, an entire option granted between February 10, 2005 and December 31, 2008. You may not elect to exchange a portion of a Current Option for a Replacement Option. For example, if an Eligible Person holds a Current Option with respect to 1,000 shares of common stock that is eligible for exchange, the Current Option with respect to all 1,000 shares of common stock must be tendered for exchange. The Replacement Options will be issued under the Plan. The terms and conditions of a Replacement Option will be similar to the tendered option it replaces, except that the Replacement Option will have a new exercise price and vesting schedule (as described below).

The Replacement Options will be granted on or about the first business day after the Cancellation Date. Assuming we do not extend the Expiration Date, we presently expect the Grant Date of the Replacement Options to be on or about February 16, 2009.

The Offer is subject to the terms and conditions described in this Offer to Exchange. We will only accept tendered options that are properly exchanged and not validly withdrawn in accordance with Section 5 of this Offer to Exchange before the Offering Period expires on the Expiration Date.

Your participation in the Option Exchange Program is voluntary. If you properly tender your eligible vested or unvested Current Options and such tendered options are accepted for exchange, the tendered options will be cancelled and, subject to the terms of the Offer and your continued employment with or service to the Company, you will be entitled to receive unvested Replacement Options with respect to the same number of shares of common stock that you tendered pursuant to Current Options, subject to adjustments for any future stock splits, stock dividends and similar events, in accordance with the terms of the Plan. For example, if an Eligible Person exchanges a partially vested Current Option with respect to 1,000 shares of common stock, the Current Option will be replaced with an unvested Replacement Option to acquire 1,000 shares of common stock. The Replacement Options will be issued under the Plan. The terms and conditions of a Replacement Option will be similar to the tendered option it replaces, except that the Replacement Option will have a new exercise price and vesting schedule (as described below).

The term "Expiration Date" means 5:00 p.m., Pacific Standard Time, on February 12, 2009, unless and until we, in our discretion, extend the Offering Period, in which event the term "Expiration Date" refers to the latest time and date at which the Offer, as so extended, expires. See Section 14 below of this Offer to Exchange for a description of our rights to extend, delay, terminate and amend the Offer.

If we decide to take any of the following actions, we will notify you of such action in writing after the date of such action:

- (a) we increase or decrease the amount of consideration offered for the options; or

(b) we increase or decrease the number of options eligible to be tendered for exchange in the Offer.

We will also notify you of any other material change in the information contained in the Offer to Exchange in the manner required by applicable law. For purposes of the Offer, a "business day" means any day other than Saturday, Sunday or a U.S. federal holiday and consists of the time period from 12:01 a.m. through 12:00 midnight, Eastern Standard Time.

As of January 12, 2009, options to purchase an aggregate of 569,548 shares of our common stock were eligible for exchange under the Offer.

3. Purpose of the Offer.

We granted the options outstanding under the Plan to motivate and reward our employees, consultants, executive officers and directors to encourage their continued contribution to the Company. As a result of the extreme volatility in our industry and a steep decline in our stock price in 2008, we have many stock options outstanding with exercise prices significantly higher than the current stock price. We believe these options are unlikely to be exercised in the foreseeable future and therefore are no longer effectively providing the motivation and retention that they were intended to provide. By making the Offer to exchange eligible Current Options for unvested Replacement Options that will have an exercise price equal to the closing sales price of our common stock on the Grant Date, we intend to provide Eligible Persons with the benefit of owning options that over time may have a greater potential to increase in value. In addition, we hope to create better performance incentives for Eligible Persons and thereby maximize stockholder value.

Although we anticipate that the Replacement Options will have a lower exercise price than the Current Options, we cannot guarantee that this will be the case.

If, after the expiration of the Offering Period but prior to the grant of the Replacement Options, you change your place of residence to a country other than the United States, you may not have a right to any Replacement Options that would have been granted to you on the Grant Date and you will not have a right to any stock options that were previously cancelled.

We may engage in transactions in the future that could significantly change our structure, ownership, organization or management or the make-up of our Board of Directors and that could significantly affect the price of our stock. If we engage in such a transaction or transactions prior to the date we grant the Replacement Options, our stock price could increase (or decrease) and the exercise price of the Replacement Options could be higher (or lower) than the exercise price of the Current Options you elect to have cancelled as part of the Offer. The exercise price of any Replacement Options granted to you in return for options you elect to exchange will be the closing sales price of our common stock on the Grant Date, as determined under the Plan. You will be at risk for any increase in our stock price during the period prior to the Grant Date for these and other reasons.

If we merge into or are acquired by another company prior to the Expiration Date, you may withdraw your tendered Current Options and retain all the rights afforded you to acquire our common stock under the existing option agreements evidencing those options.

Neither we nor our Board of Directors make any recommendation as to whether you should elect to exchange your options, nor have we authorized any person to make any such recommendation. We recommend that you evaluate carefully all of the information in this Offer to Exchange and consult your own legal, investment and tax advisors. You must make your own decision whether to elect to exchange your options.

4. Procedures for Participating in the Offer.

Proper Tender of Options. To validly tender your options pursuant to the Offer, you must, in accordance with the terms of the letter of transmittal and the instructions attached thereto, properly complete, duly execute and deliver to us the letter of transmittal, or a facsimile thereof, along with any other required documents. We must receive all of the required documents at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller) by 5:00 p.m., Pacific Standard Time, on February 12, 2009. **Absolutely no late forms will be accepted.**

If you do not submit your letter of transmittal to us by 5:00 p.m., Pacific Standard Time, on February 12, 2009, then you will not be allowed to participate in the option exchange, and all stock options currently held by you will remain intact at their original exercise price and with their terms and conditions as in effect on the first date of the Offering Period.

THE METHOD OF DELIVERY OF ALL DOCUMENTS IS AT THE ELECTION AND RISK OF THE TENDERING OPTION HOLDER. IF DELIVERY IS BY MAIL, WE RECOMMEND THAT YOU USE REGISTERED MAIL WITH RETURN RECEIPT REQUESTED. SINCE THE LETTER OF TRANSMITTAL NEEDS TO BE DULY EXECUTED, ONLY FACSIMILE, MAIL OR HAND DELIVERY, BUT NOT E-MAIL, WILL BE CONSIDERED PROPER DELIVERY. IN ALL CASES, YOU SHOULD ALLOW SUFFICIENT TIME TO ENSURE TIMELY DELIVERY. THE REQUIRED DOCUMENTS MUST BE RECEIVED BY THE EXPIRATION DATE. A POSTMARK PRIOR TO THE EXPIRATION DATE WILL NOT ENSURE TIMELY DELIVERY.

Determination of Validity; Rejection of Options; Waiver of Defects; No Obligation to Give Notice of Defects. We will determine, in our sole discretion, all questions as to the validity, form, eligibility (including time of receipt) and acceptance of any documentation relating to the tender of options for exchange. Our determination of these matters will be final and binding on all parties. We reserve the right to reject any or all elections to exchange options that we determine are not in appropriate form or that we determine are unlawful to accept or not timely made. We also reserve the right to waive any of the conditions of the Offer or any defect or irregularity in elections with respect to options. In the event we do waive a condition, we will waive the condition for all option holders. No election to exchange options will be deemed to have been properly made until all defects or irregularities have been cured by the electing option holder or waived by us. Neither we nor any other person is obligated to give notice of any defects or irregularities in elections, nor will anyone incur any liability for failure to give any such notice.

Our Acceptance Constitutes an Agreement. Your election to tender options for exchange pursuant to the procedures described above constitutes your acceptance of the terms and conditions of the Offer and will be controlling, absolute and final, subject to your withdrawal rights under Section 5 below and our acceptance of your tendered options in accordance with Section 6 below. **Our acceptance of the options that you elect to tender for exchange pursuant to the Offer will constitute a binding agreement between us and you upon the terms and subject to the conditions of this Offer to Exchange.** Subject to our rights to extend, terminate and amend the Offer, we currently expect that we will accept promptly after the Expiration Date all properly tendered options that have not been validly withdrawn.

5. Withdrawal Rights.

Once you have elected to exchange any or all of your eligible Current Options, you can only withdraw your tendered options in accordance with the provisions of this Section 5.

You can withdraw your tendered options at any time before 5:00 p.m., Pacific Standard Time, on February 12, 2009 (the "Expiration Date"). If the Expiration Date is extended by us beyond that time, you can withdraw your elected options at any time until the extended expiration of the Offer. Should we fail for any reason to accept your tendered options after the expiration of forty (40) Business Days from the January 12, 2009 commencement date of the Offer, you will have the right to withdraw all of your tendered options. (See Section 6 below.)

If your employment with, or service to, us terminates prior to the Expiration Date, your tender will automatically be withdrawn. Since your tendered Current Options will automatically be withdrawn, you will not receive any Replacement Options in exchange for your Current Options. If this occurs, you may exercise the vested portion of any Current Options that you had tendered for exchange in accordance with their terms. The vested portion of your Current Options will generally be exercisable for three (3) months following your last day of employment or service.

To validly withdraw tendered options, you must deliver to us a written notice of withdrawal, or a facsimile thereof, with the required information, while you still have the right to withdraw the tendered options. The notice of withdrawal must be submitted to us at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller). Note that delivery by e-mail will not be accepted. The notice of withdrawal (as attached to this Offer to Exchange) must specify your name, the grant date, exercise price and total number of option shares subject to each option to be withdrawn. Except as described in the following sentence, the notice of withdrawal must be executed by the option holder who tendered the options to be withdrawn exactly as such option holder's name appears on the option agreement or agreements evidencing such options. If the signature is by a trustee, executor, administrator, guardian, attorney-in-fact, officer of a corporation or another person acting in a fiduciary or representative capacity, the signer's full title and proper evidence of the authority of such person to act in such capacity must be indicated on the notice of withdrawal.

You may not rescind any withdrawal (although you may re-elect to tender options previously withdrawn), and any options you withdraw will thereafter be deemed not properly tendered for purposes of the Offer, unless you properly re-tender those options before the Expiration Date by following the procedures described in Section 4 above.

Neither Threshold nor any other person is obligated to give notice of any defects or irregularities in any notice of withdrawal, nor will anyone incur any liability for failure to give any such notice. We will determine, in our sole discretion, all questions as to the form and validity, including time of receipt, of notices of withdrawal. Our determination of these matters will be final and binding on all parties.

THE METHOD OF DELIVERY OF ALL DOCUMENTS IS AT THE ELECTION AND RISK OF THE TENDERING OPTION HOLDER. IF DELIVERY IS BY MAIL, WE RECOMMEND THAT YOU USE REGISTERED MAIL WITH RETURN RECEIPT REQUESTED. SINCE THE NOTICE OF WITHDRAWAL NEEDS TO BE DULY EXECUTED, ONLY FACSIMILE, MAIL OR HAND DELIVERY, BUT NOT EMAIL, WILL BE CONSIDERED PROPER DELIVERY. IN ALL CASES, YOU SHOULD ALLOW SUFFICIENT TIME TO ENSURE TIMELY DELIVERY. THE REQUIRED DOCUMENTS MUST BE RECEIVED BY THE EXPIRATION DATE. A POSTMARK PRIOR TO THE EXPIRATION DATE WILL NOT ENSURE TIMELY DELIVERY.

6. Acceptance of Options for Exchange and Issuance of Replacement Options.

Upon the terms and subject to the conditions of the Offer, and as promptly as practicable following the expiration of the Offering Period, we will accept for exchange and cancel options properly tendered for exchange and not validly withdrawn before the Expiration Date. Promptly after the expiration of the Offering Period, you will receive correspondence confirming that your options have been accepted for exchange and cancelled and summarizing your rights as a participant in the exchange program, including the number of shares of our common stock your Replacement Options will entitle you to purchase. Subject to our rights to extend, terminate and amend the Offer, we currently expect that we will accept all properly tendered options that have not been validly withdrawn upon expiration of the Offer.

Replacement Options will be granted promptly after the Expiration Date to eligible persons who elect to exchange their Current Options in accordance with the terms and conditions of the Offer. We currently expect the Grant Date to be on or about February 16, 2009.

If you do not remain an employee, consultant, executive officer or director of Threshold from the date we cancel the options you surrendered for exchange through the date we grant the Replacement Options, you will not receive any Replacement Options and you will not receive any other consideration for your surrendered options, even if your surrendered options were fully vested.

Therefore, if you leave the employ of Threshold or cease to provide services to Threshold voluntarily, involuntarily, or for any other reason after the cancellation of the options you tendered for exchange and before your Replacement Options are granted, you will not have a right to any stock options that were previously cancelled and you will not have a right to the options that would have been granted on the replacement Grant Date. Also, if you change your place of residence to a country other than the United States after the cancellation of the options you tendered for exchange and before your Replacement Options are granted, you will not have a right to any stock options that were previously cancelled and you may not have a right to any Replacement Options that would have been granted on the Grant Date, depending on whether the application of local rules and regulations make the grant of Replacement Options impractical or unlawful.

For purposes of the Offer, we will be deemed to have accepted for exchange options that are validly tendered for exchange and not properly withdrawn, when we cancel such options. We will provide a notice to you promptly after the cancellation of your validly tendered options. After the Grant Date of the Replacement Options, you will receive new option agreements for your Replacement Options.

7. Price Range of Common Stock Underlying the Options.

Our common stock is quoted on the NASDAQ Capital Market under the symbol "THLD." The following table sets forth, for the periods indicated, the high and low sales prices for Threshold's common stock on the NASDAQ Capital Market (on and after June 17, 2008) or the NASDAQ Global Market (prior to June 17, 2008), as adjusted for a 1-for-6 reverse stock split effective August 20, 2008:

	High	Low
2008 Fiscal Year		
Quarter Ending December 31, 2008	\$ 1.37	\$0.21
Quarter Ended September 30, 2008	\$ 2.66	\$1.25
Quarter Ended June 30, 2008	\$ 2.76	\$1.86
Quarter Ended March 31, 2008	\$ 4.56	\$2.10
2007 Fiscal Year		
Quarter Ended December 31, 2007	\$ 5.76	\$3.06
Quarter Ended September 30, 2007	\$ 7.80	\$3.90
Quarter Ended June 30, 2007	\$13.44	\$7.14
Quarter Ended March 31, 2007	\$24.60	\$8.64

On January 9, 2009, the closing sales price of our common stock on the NASDAQ Capital Market was \$0.79 per share.

We recommend that you obtain current market quotations for our common stock before deciding whether to elect to tender your options for exchange.

8. Source and Amount of Consideration; Terms of Replacement Options.

Consideration. We will issue Replacement Options, subject to applicable laws and regulations, to purchase common stock under the Plan in exchange for the eligible Current Options properly tendered and cancelled in the Offer by us, subject to the terms set forth in this Offer to Exchange.

If an Eligible Person exchanges either vested or unvested Current Options, the Current Options will be replaced with unvested Replacement Options to acquire the same number of shares of common stock tendered pursuant to such Current Options, subject to adjustments for any future stock splits, stock dividends and similar events, in accordance with the terms of the Plan.

The issuance of Replacement Options under the Offer will not create any contractual or other right of the recipients to receive any future grants of stock options or benefits instead of stock options or any right of continued employment.

Terms of Replacement Options. As a condition to the issuance of the Replacement Options we will enter into new option agreements with each Eligible Person who has elected to exchange options in the Offer. The Replacement Options will be subject to the terms of the Plan and the option agreement. The terms of the Replacement Options are expected to be similar to the related Current Options cancelled in the exchange, except that (i) the Replacement Options will be granted on a date promptly after the date the tendered options are cancelled, (ii) the exercise price of the Replacement Options will be the closing sales price of our common stock on the Grant Date and (iii) the Replacement Options will be entirely unvested on the Grant Date and subject to the vesting schedule described below. Threshold expects that an exercise price equal to the closing sales price of our common stock on the Grant Date will be less than the existing exercise price of the Current Options. However, there is no guarantee that the exercise price of the Replacement Options will be less than the exercise price of the Current Options.

Each Replacement Option will be entirely unvested on the Grant Date, regardless of the vesting status of a Current Option Each Replacement Option will vest pro-rata on a monthly basis measured from the Grant Date such that each Replacement Option will become fully vested on the later of (a) January 12, 2010 and (b) same date the Current Option would have become fully vested had it not been exchanged. For example, assume an Eligible Person tenders a partially vested Current Option to purchase 10,000 shares of Threshold common stock that would have become fully vested on March 1, 2012. The Replacement Option will be entirely unvested on the Grant Date and will vest pro-rata on a monthly basis such that on March 1, 2012, all 10,000 shares subject to the Replacement Option will become vested, subject to the Eligible Person's continued service with the Company. Alternatively, assume an Eligible Person tenders a fully vested Current Option to purchase 8,000 shares of Threshold common stock. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on January 12, 2010, all 8,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

Each Replacement Option will maintain the original term and expiration date of the Current Option which was cancelled in exchange for the Replacement Option. For example, if the Current Option had a ten year term and would have terminated on July 1, 2017, then the Replacement Option will also terminate on July 1, 2017.

The terms and conditions of your Current Options are set forth in the applicable stock option plan and the stock option agreement you entered into in connection with each grant. The description of the Replacement Options set forth herein is only a summary of some of the material provisions but is not complete. These descriptions are subject to, and qualified in their entirety by reference to, the actual provisions of the Plan. Information regarding the Plan may be found in the S-8 Registration Statement and related prospectus prepared by us in connection with the Plan. You can obtain a copy of the Plan and the related prospectus by submitting a request to Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, in writing at 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063, by telephone at (650) 474-8200 or by e-mail at jfernandes@thresholdpharm.com.

Exercise. You may exercise the vested portion of your Replacement Options at any time after the Grant Date but prior to the date the Replacement Option expires. Generally speaking, you will have ninety (90) days from the effective date of your termination of employment to exercise any vested portion of your Replacement Options, as set forth in the Plan and the stock option agreement related thereto. If your employment with Threshold terminates due to death or disability, generally speaking you (or your estate in the event of your death) will have one (1) year from the effective date of your termination due to death or disability to exercise any vested portion of your Replacement Options, as set forth in the Plan and the stock option agreement related thereto.

Payment of Exercise Price. You may exercise your options, in whole or in part, by following the procedures established by the Company's designated broker with respect to the payment of the exercise price. The Board of Directors determines the acceptable form and method of payment for exercising an option. The permissible methods of payment of the option exercise price generally are the following:

- cash, check or wire transfer;
- consideration received by the Company under a procedure under which a licensed broker-dealer advances funds on behalf of an option holder or sells shares of Company common stock issuable upon exercise of an option;
- tender of shares of Company common stock, which, if acquired from the Company, have been owned by the option holder for no less than six (6) months, having a fair market value on the date of exercise equal to the aggregate exercise price;
- delivery in shares of Company common stock for the value of the net appreciation of such shares at the time of exercise over the exercise price;

- cancellation of any debt owed by the Company to an option holder, including without limitation waiver of compensation due or accrued for services previously rendered; or
- a combination of the foregoing methods.

Change of Control. In the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of our Company, all outstanding options under the Plan shall become vested and exercisable, unless the acquiring company assumes or substitutes the outstanding option.

Tax Consequences of Options. You should refer to Section 13 below for a discussion of U.S. federal tax consequences of accepting the Offer to tender certain Current Options in exchange for Replacement Options.

Registration of Option Shares. All shares of common stock issuable upon exercise of options under the Plan, including the shares that will be issuable upon exercise of all Replacement Options, have been registered under the U.S. Securities Act of 1933 on one or more registration statements on Form S-8 filed with the SEC. Subject to the Company's Insider Trading Policy and unless you are considered an "affiliate" of Threshold, you will be able to sell your option shares free of any transfer restrictions under applicable U.S. securities laws.

Important note: the statements in this Offer to Exchange concerning the Plan and the Replacement Options are merely summaries and are not complete. The statements are subject to, and are qualified in their entirety by reference to, all provisions of the Plan and form of stock option agreement under the Plan. Please contact Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, to receive a copy of the Plan, prospectus or form of stock option agreement.

9. Information About Threshold Pharmaceuticals, Inc.

Business Overview

Threshold is a biotechnology company focused on the discovery and development of drugs targeting the microenvironment of solid tumors as novel treatments for patients living with cancer. The microenvironment of solid tumors is characterized by, among other things, hypoxia or lack of oxygen, disordered blood vessel growth, and the upregulation of glucose transport. This hypoxic environment is known to be resistant to standard chemotherapy and radiation. It is thought to be responsible for the poor prognosis of many solid tumors and treating the hypoxic environment is currently believed to be a significant unmet medical need. Our product candidates are designed to selectively target the hypoxic microenvironment of tumors either by selective toxin activation in the case of our hypoxia activated prodrug (HAP) program, including TH-302, or potentially utilizing the consequences of increased uptake of glucose in cancer cells relative to most normal cells. Our product candidates glufosfamide and 2-deoxyglucose ("2DG") share certain structural characteristics with glucose but act instead as chemotherapeutic toxins when taken up by a cell.

Our focus is on product candidates for the treatment of patients living with cancer. We have three product candidates for which we have exclusive worldwide marketing rights:

- TH-302, which we discovered, is our lead product candidate for the potential treatment of patients with cancer. It is a novel drug candidate that is activated under the severe hypoxic conditions of most solid tumors. In May 2007, we announced the filing of an investigational new drug application with the U.S. Food and Drug Administration for TH-302, and in July 2007, we initiated a Phase 1 clinical trial evaluating the safety of TH-302 in patients with advanced solid tumors. In July 2008, we reported top line results for this clinical trial. In August 2008, we initiated a complete Phase 1/2 clinical trial of TH-302 which includes three separate treatment arms with each arm combining TH-302 in combination with a different chemotherapeutic agent for the treatment of patients with solid tumors. In September 2008, we also initiated a Phase 1/2 clinical trial of TH-302 in combination with doxorubicin in patients with advanced soft tissue sarcoma.
- Glufosfamide is our most advanced product candidate for the potential treatment of patients with cancer. In February 2007, we announced that our Phase 3 clinical trial did not reach its primary endpoint of a statistically significant survival benefit for patients with metastatic pancreatic cancer that relapsed following chemotherapy with gemcitabine. In the third quarter of 2007, we presented final results including promising tumor response and survival data from the Phase 2 stage of a clinical trial of glufosfamide plus gemcitabine for the first-line treatment of pancreatic cancer. In 2007 we initiated a Phase 2 clinical trial of glufosfamide in soft-tissue sarcoma, platinum-resistant ovarian cancer and recurrent sensitive small cell lung cancer. All studies have been closed to enrollment and top-line results from each study have been reported. We plan to partner or seek external funding for the future development of glufosfamide.
- 2DG is our product candidate for the potential treatment of patients with cancer and is being evaluated in a Phase 1 clinical trial alone and in combination with docetaxel as a combination therapy. This clinical trial began in the first quarter of 2004 and we completed enrollment in the first half of 2008. We presented top-line results for this clinical trial in August 2008. We are not planning on conducting any additional clinical trials of 2DG as we are focusing our resources on the development of our hypoxia-activated prodrug, TH-302, and the out-licensing of glufosfamide for the potential treatment of solid tumors.

We are also working to discover additional hypoxia activated products that will selectively target cancer cells.

We are a development stage company incorporated in October 2001. We have devoted substantially all of our resources to research and development of our product candidates. We have not generated any revenue from the sale of our product candidates, and prior to our initial public offering in February 2005, we funded our operations through the private placement of equity securities. In February 2005, we completed our initial public offering that raised net proceeds of \$38.1 million, and in October 2005, we completed an offering of common stock that raised net proceeds of \$62.4 million. In August 2008, we completed an offering of common stock and warrants that raised net proceeds of \$16.8 million. As of September 30, 2008 we had cash, cash equivalents and marketable securities of \$26.5 million. The net loss for the three and nine months ended September 30, 2008 was \$4.6 million and \$13.5 million, respectively, and the cumulative net loss since our inception through September 30, 2008 was \$178.8 million. Our book value per share as of September 30, 2008 was \$1.68. Book value per share is the value of our total stockholders' equity divided by the number of our issued and outstanding common shares, net of shares held in treasury, which at September 30, 2008 amounted to \$25.5 million. We have not paid any cash dividends or repurchased any of our shares in the past two years.

We expect to continue to incur losses from operations in the future. We expect that expenses will decrease in 2008 compared to 2007 due to a reduced workforce and reduced number of patients in smaller clinical trials, and that our cash, cash equivalents and marketable securities as of September 30, 2008 will be sufficient to fund our projected operating requirements through the fourth quarter of 2009, including completing our current ongoing clinical trials and conducting research and discovery efforts toward additional product candidates, working capital and general corporate purposes. Research and development expenses may fluctuate significantly from period to period as a result of the progress and results of our clinical trials.

REVERSE STOCK SPLIT

On August 13, 2008, the Company's Board of Directors approved a 1-for-6 reverse split of its common stock, following approval by the Company's stockholders on May 13, 2008. The reverse stock split was effective August 20, 2008. As a result, the Company's issued and outstanding common stock was reduced from approximately 37,460,970 to approximately 6,243,469 shares. The par value of the common stock was not affected by the reverse stock split and remains at \$0.001 per share. Consequently, on the Company's balance sheet, the aggregate par value of the issued common stock was reduced by reclassifying the par value amount of the eliminated shares of common stock to Additional Paid-in Capital. The Company paid cash in lieu of any fractional shares to which a holder of common stock would otherwise have been entitled as a result of the reverse stock split, including fractional shares for the in-the-money stock options. In addition, the number of authorized shares of common stock was reduced from 150,000,000 to 50,000,000.

SELECTED FINANCIAL DATA

The selected financial data set forth below has been prepared in accordance with accounting principles generally accepted in the United States of America and should be read together with and is qualified by reference to "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2007 and our audited consolidated financial statements, including the notes thereto and our independent registered public accounting firm's report thereon included in Item 8 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 2 of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 and our unaudited consolidated financial statements including the notes thereto, included in Item 1 of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, except that the weighted average number of shares of common stock and the per share information for all annual periods has been revised to reflect the Company's 1-for-6 reverse stock split of its outstanding common stock effective August 20, 2008. Nine month financial data reflected this adjustment when filed in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008. The selected data in this section are not intended to replace the consolidated financial statements included in these reports, except that the weighted average number of shares of common stock and per share information for all periods has been revised to reflect the 1-for-6 reverse stock split as described above. As discussed in Note 9 in Item 8 "Financial Statements and Supplementary Data" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, on January 1, 2006, the Company began accounting for stock options and stock purchase rights under the provisions of Statement of Financial Accounting Standards No. 123(R), "Share-Based Payments" ("SFAS 123(R)"), which requires the recognition of the fair value of stock-based compensation.

	Nine Months Ended September 30,		Years Ended December 31,				
	2008	2007	2007	2006	2005	2004	2003
	(In thousands, except per share data)						
Revenue	\$ 1,080	\$ 1,077	\$ 1,436	\$ 1,461	\$ 690	\$ —	\$ —
Operating expenses:							
Research and development (1)	9,873	18,230	23,375	46,267	35,991	16,327	6,252
General and administrative (1)	5,067	7,517	10,411	14,453	11,235	7,649	2,057
Total operating expenses	14,940	25,747	33,786	60,720	47,226	23,976	8,309
Loss from operations	(13,860)	(24,670)	(32,350)	(59,259)	(46,536)	(23,976)	(8,309)
Interest and other income, net	414	1,524	1,841	3,729	2,159	443	65
Interest expense	(52)	(110)	(155)	(156)	(31)	(33)	(59)
Net loss	(13,498)	(23,256)	(30,664)	(55,686)	(44,408)	(23,566)	(8,303)
Dividend related to beneficial conversion feature of redeemable convertible preferred stock	—	—	—	—	—	—	(40,862)
Net loss attributable to common stockholders	(13,498)	(23,256)	(30,664)	(55,686)	(44,408)	(23,566)	(49,165)
Net loss per common share:							
Basic and diluted	\$ (1.86)	\$ (3.77)	\$ (4.97)	\$ (9.20)	\$ (9.81)	\$ (121.47)	\$ (3,072.81)
Weighted average number of shares used in per common share calculations:							
Basic and diluted	7,276	6,165	6,176	6,056	4,529	194	16
(1) Includes employee and non-employee non-cash stock-based compensation of:							
Research and development	\$ 1,157	\$ 1,797	\$ 2,413	\$ 5,008	\$ 5,951	\$ 2,960	\$ 313
General and administrative	\$ 1,409	\$ 2,678	\$ 3,496	\$ 5,141	\$ 3,470	\$ 3,015	\$ 753

	As of September 30,		As of December 31,				
	2008	2007	2007	2006	2005	2004	2003
	(In thousands)						
Balance Sheet Data:							
Cash, cash equivalents and marketable securities	\$ 26,549	\$ 22,693	\$ 22,693	\$ 52,810	\$ 99,654	\$ 28,665	\$ 40,818
Working capital	24,138	17,884	17,884	43,698	90,655	21,967	40,177
Total assets	28,982	25,814	25,814	57,034	102,101	32,213	41,270
Notes payable, less current portion	—	337	337	1,247	151	382	242
Total liabilities	3,498	6,227	6,227	12,796	12,733	8,847	1,126
Redeemable convertible preferred stock	—	—	—	—	—	49,839	49,839
Total stockholders' equity (deficit)	25,484	19,587	19,587	44,238	89,368	(26,473)	(9,695)

Our common stock is traded on the NASDAQ Capital Market under the symbol "THLD." Our principal executive offices are located at 1300 Seaport Boulevard, Suite 500,

Redwood City, California, 94063. Our telephone number is (650) 474-8200. Our website is located at www.thresholdpharm.com.

The financial information included in our Annual Report on Form 10-K for the year ended December 31, 2007 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2008, June 30, 2008 and September 30, 2008, respectively, filed with the SEC, are incorporated herein by reference and copies of such documents are included with this Offer to Exchange.

Information concerning risk factors included in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 (under "Part II, Item 1A — Risk Factors") is incorporated by reference herein. A copy of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 is included with this Offer to Exchange. In addition to these risk factors, you should carefully consider the risks described under Section 17 below when deciding whether or not to elect to tender your options pursuant to the Offer.

10. Interests of Directors and Executive Officers; Transactions and Arrangements Concerning the Current Options and Our Common Stock.

A list of our executive officers and directors is set forth below. As of January 12, 2009, our executive officers and directors as a group (nine (9) persons) beneficially owned options outstanding under the Plan to purchase a total of 499,996 shares of our common stock, which represented approximately 52.9% of the shares subject to all options outstanding as of that date. **Certain options held by our executive officers and directors ARE ELIGIBLE to be exchanged in the Offer.**

The following table sets forth the beneficial ownership of each of our executive officers and directors of (i) all stock options (including options eligible and not eligible for exchange in the Offer and (ii) Current Options eligible for exchange as of January 12, 2009.

Name	Number of Options (Eligible and Not Eligible For Exchange)	Exercise Price	Percentage of Total Outstanding Stock Options*	Number of Current Options Eligible for Exchange	Exercise Price	Percentage of Total Outstanding Stock Options Eligible For Exchange**	
Harold E. Selick, <i>Ph.D.</i>	41,666	\$ 3.18	4.4%	41,666	\$ 3.18	7.3%	
	41,666	\$ 9.00	4.4%	41,666	\$ 9.00	7.3%	
	25,000	\$ 15.42	2.6%	25,000	\$15.42	4.4%	
	70,000	\$ 0.79	7.4%	—	—	—	
Total	178,332		18.9%	108,332		19.0%	
John G. Curd, <i>M.D.</i>	24,999	\$ 3.18	2.6%	24,999	\$ 3.18	4.4%	
	78,333	\$ 3.84	8.3%	78,333	\$ 3.84	13.8%	
	35,000	\$ 0.79	3.7%	—	—	—	
	Total	138,332		14.6%	103,332		18.1%
Mark D. Matteucci, <i>Ph.D.</i>	25,000	\$ 3.18	2.6%	25,000	\$ 3.18	4.4%	
	12,500	\$ 9.00	1.3%	12,500	\$ 9.00	2.2%	
	8,332	\$ 15.42	0.9%	8,332	\$15.42	1.5%	
	25,000	\$ 0.79	2.6%	—	—	—	
Total	70,832		7.5%	45,832		8.0%	
Jeffrey W. Bird, <i>M.D.</i> , <i>Ph.D.</i>	5,000	\$ 0.48	0.5%	5,000	\$ 0.48	0.9%	
	10,000	\$ 0.79	1.1%	—	—	—	
	Total	15,000		1.6%	5,000		0.9%
	Bruce C. Cozadd	2,500	\$ 2.16	0.3%	2,500	\$ 2.16	0.4%
2,500		\$ 9.24	0.3%	2,500	\$ 9.24	0.4%	
5,000		\$ 15.42	0.5%	5,000	\$15.42	0.9%	
10,000		\$ 0.79	1.1%	—	—	—	
Total	20,000		2.1%	10,000		1.8%	
William A. Halter	2,500	\$ 2.16	0.3%	2,500	\$ 2.16	0.4%	
	2,500	\$ 9.24	0.3%	2,500	\$ 9.24	0.4%	
	5,000	\$ 15.42	0.5%	5,000	\$15.42	0.9%	
	10,000	\$ 0.79	1.1%	—	—	—	
Total	20,000		2.1%	10,000		1.8%	
David R. Hoffman	2,500	\$ 2.16	0.3%	2,500	\$ 2.16	0.4%	
	5,000	\$ 9.06	0.5%	5,000	\$ 9.06	0.9%	
	10,000	\$ 0.79	1.1%	—	—	—	
	Total	17,500		1.9%	7,500		1.3%
Wilfred E. Jaeger, <i>M.D.</i>	2,500	\$ 2.16	0.3%	2,500	\$ 2.16	0.4%	
	2,500	\$ 9.24	0.3%	2,500	\$ 9.24	0.4%	
	5,000	\$ 15.42	0.5%	5,000	\$15.42	0.9%	
	10,000	\$ 0.79	1.1%	—	—	—	
Total	20,000		2.1%	10,000		1.8%	
George G.C. Parker, <i>Ph.D.</i>	2,500	\$ 2.16	0.3%	2,500	\$ 2.16	0.4%	
	2,500	\$ 9.24	0.3%	2,500	\$ 9.24	0.4%	
	5,000	\$ 15.42	0.5%	5,000	\$15.42	0.9%	
	10,000	\$ 0.79	1.1%	—	—	—	
Total	20,000		2.1%	10,000		1.8%	
Grand Total	499,996		52.9%	309,996		54.4%	

* Based upon a total number of 944,598 options (eligible and not eligible for exchange) held by employees, consultants, executive officers and directors as of the close of business on January 12, 2009.

** Based upon a total number of 569,548 Current Options eligible for exchange held by employees, consultants, executive officers and directors as of the close of business on January 12, 2009.

In the sixty (60) days prior to January 12, 2009, none of our executive officers or directors acquired or disposed of any shares of our common stock or exercised any stock options. On January 9, 2009, we granted the following options pursuant to the Plan to purchase our common stock with an exercise price equal to \$0.79 per share: Harold E. Selick, 70,000 options; John G. Curd, 35,000 options; Mark Matteucci, 25,000 options; Jeffrey W. Bird, 10,000 options; Bruce C. Cozadd, 10,000 options; William A. Halter, 10,000 options; David R. Hoffman, 10,000 options; Wilfred E. Jaeger, 10,000 options; and George G.C. Parker, 10,000 options. None of these options are eligible to be tendered in the Offer.

None of our executive officers or directors have been party to any judicial or administrative proceeding during the past five (5) years (except for matters that were dismissed without sanction or settlement) that resulted in a judgment, decree or final order enjoining the person from future violations of, or prohibiting activities subject to, federal or state securities laws, or a finding of any violation of federal or state securities laws. The address and telephone number of each director and executive officer is: c/o Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Redwood City, Suite 500, California 94063. The telephone number at that location is (650) 474-8200.

Change of Control Severance Agreements

We have entered into amended and restated change of control severance agreements with each of Drs. Selick, Curd and Matteucci.

Each of these agreements provides, among other things, that if the officer's employment is terminated by the Company without cause or is involuntarily terminated, then such officer will be entitled to a severance payment consisting of twelve (12) months base salary as in effect as of the date of termination. If the officer's employment is terminated without cause or involuntarily terminated within eighteen (18) months following a change of control, then such officer will be entitled to the following severance benefits: twelve (12) months base salary and any applicable allowances in effect as of the date of termination or, if greater, as in effect in the year in which the change of control occurs, immediate acceleration and vesting of all stock options or other awards granted prior to the change of control, the termination of the Company's right to repurchase shares of restricted stock purchased prior to the change of control, extension of the exercise period for stock options or other awards granted prior to the change of control to two years following the date of termination and up to twelve (12) months of health benefits. Replacement Options will continue to be subject to the terms of these agreements.

11. Status of Options Acquired by Us in the Offer; Accounting Consequences of the Offer.

Options we acquire pursuant to the Offer will be cancelled no later than the first business day following the Expiration Date, and the shares of common stock subject to those options will be returned to the pool of shares available for the grant of new awards and for issuance of shares upon the exercise of new awards under the Plan. To the extent such shares are not fully reserved for issuance upon exercise of the Replacement Options to be granted in connection with the Offer, the shares will be available for future awards to employees, consultants, executive officers, directors and other eligible plan participants without further stockholder action, except as required by applicable law or the rules of the NASDAQ Stock Market or any other securities quotation system or stock exchange on which our common stock is then quoted or listed.

The Replacement Options will be subject to the accounting standards under FAS 123(R). The measurement date for the compensation expense associated with the Replacement Options will be the Grant Date. The compensation expense will be measured based on Threshold's selected pricing model. The compensation expense will be recognized ratably over the vesting life of the Replacement Option.

Under the provisions of FAS 123(R), the Offer may be treated as a modification of the Current Options. If a modification results in incremental value being transferred from Threshold to the recipient of a Replacement Option, that incremental value represents additional compensation expense. Any additional compensation expense to be recognized would be calculated as: fair value of the modified award less the fair value of the original award at the modification date.

12. Legal Matters; Regulatory Approvals.

We are not a party to any material legal proceedings relating to or affecting the Offer. We are not aware of any license or regulatory permit that appears to be material to our business that might be adversely affected by our cancellation of Current Options and issuance of Replacement Options as contemplated by this Offer to Exchange. If any approval or other action by any government, or governmental, administrative or regulatory authority or agency, domestic or foreign, is required for the issuance of our options and a procedure for obtaining such approval is practically available, as contemplated herein, we presently contemplate that we will undertake commercially reasonable steps to obtain such approval or take such other action. We are unable to predict whether we may in the future determine that we are required to delay the acceptance of options or not accept options for exchange pending the outcome of any such action. We cannot be certain that any such approval or other action, if needed, would be obtained or would be obtained without substantial conditions or that the failure to obtain any such approval or other action might not result in adverse consequences to our business. Our obligation under the Offer to accept options tendered for exchange and to issue new options for options tendered for exchange is subject to conditions, including the conditions described in Schedule A, which is attached to this Offer to Exchange.

If we are prohibited by federal or state securities laws or regulations from granting Replacement Options after the date that we cancel the eligible Current Options accepted for exchange, we will either not grant any Replacement Options or delay the grant of Replacement Options, in our sole discretion. If any such prohibition arises, we will use reasonable efforts to effect the grant, but if the grant is prohibited we will not grant any Replacement Options or we will delay the grant. If the grant of Replacement Options is prohibited you will not receive any other consideration for the options that you tendered for exchange.

13. Material U.S. Federal Income Tax Consequences.

The following is a summary of the material U.S. federal income tax consequences of the exchange of options under the Offer. This discussion is based on the Internal Revenue Code, its legislative history, Treasury Regulations and administrative and judicial interpretations as of the date of this Offer to Exchange, all of which may change, possibly on a retroactive basis. This summary does not discuss all of the tax consequences that may be relevant to you in light of your particular circumstances, nor is it intended to apply in all respects to all categories of option holders.

If you exchange Current Options for Replacement Options, you will not be required to recognize income for federal income tax purposes at the time of the exchange. We believe that the exchange will be treated as a non-taxable exchange.

At the Grant Date of the Replacement Options, you will not be required to recognize additional income for federal income tax purposes. The Replacement Options will be non-qualified stock options.

We recommend that you consult your own tax advisor with respect to the federal, state and local tax consequences of participating in the Offer.

U.S. Federal Income Tax Consequences of Non-Qualified Stock Options. Under current law, you will not realize taxable income upon the grant of a non-incentive or non-qualified stock option. However, when you exercise the option, the difference between the exercise

price of the option and the fair market value of the shares subject to the option on the date of exercise will be treated as taxable compensation income to you, and you will be subject to withholding of income and employment taxes at that time. We will be entitled to a deduction equal to the amount of compensation income taxable to you.

The subsequent sale of the shares acquired pursuant to the exercise of a non-qualified stock option generally will give rise to capital gain or loss equal to the difference between the sale price and the sum of the exercise price paid for the shares plus the ordinary income recognized with respect to the shares, and these capital gains or losses will be treated as long term capital gains or losses if you held the shares for more than one year following exercise of the option.

14. Extension of Offer; Termination; Amendment.

We expressly reserve the right, in our discretion, at any time and from time to time, and regardless of whether any event set forth in the attached Schedule A has occurred or is deemed by us to have occurred, to extend the period of time during which the Offer is open, and thereby delay the acceptance for exchange of any options, by giving oral or written notice of such extension, no later than 9:00 a.m., Eastern Standard Time, on the next business day after the expiration of the Offering Period, to the option holders eligible to participate in the exchange.

We also expressly reserve the right, in our judgment, prior to the Expiration Date, to terminate or amend the Offer and to postpone our acceptance and cancellation of any options elected for exchange upon the occurrence of any of the conditions specified in Schedule A by giving oral or written notice of such termination, amendment or postponement to the option holders eligible to participate in the exchange. In the event such termination or withdrawal of the Offer occurs prior to the Expiration Date, we will release the options tendered for exchange promptly after termination or withdrawal of the Offer and the options you previously tendered for exchange will continue to be subject to their terms as in effect on the first date of the Offering Period.

Subject to compliance with applicable law, we further reserve the right, in our sole discretion, and regardless of whether any event set forth in Schedule A of this Offer to Exchange has occurred or is deemed by us to have occurred, to amend the Offer in any respect, including, without limitation, by decreasing or increasing the consideration offered in the Offer to option holders or by decreasing or increasing the number of options being sought in the Offer.

Amendments to the Offer may be made at any time and from time to time. In the case of an extension of the offering period, the amendment must be issued no later than 9:00 a.m., Eastern Standard Time, on the next business day after the last previously scheduled or announced Expiration Date. Notice of any amendment to the Offer will be disseminated promptly to option holders in a manner reasonably designed to inform option holders of such change.

If we materially change the terms of the Offer or the information concerning the Offer, or if we waive a material condition of the Offer, we will extend the Offer for at least a minimum of five (5) business days after the date of such waiver or change. Except for a change in the consideration offered for the options or a change in the number of options eligible for exchange in the Offer, the amount of time by which we will extend the Offer following a material change in the terms of the Offer or information concerning the Offer will depend on the facts and circumstances, including the relative materiality of such terms or information. If we decide to take any of the following actions, we will notify you of such action in writing after the date of such notice:

- (a) we increase or decrease the amount of consideration offered for the options; or
- (b) we increase or decrease the number of options eligible to be elected for exchange in the Offer.

If the Offer is scheduled to expire at any time earlier than the expiration of a period ending on the tenth (10th) business day from, and including, the date that notice of such increase or decrease is first sent or given in the manner specified in this Section 14, we will extend the Offer so that the Offer is open at least ten (10) business days following the sending or giving of notice.

15. Fees and Expenses.

We will not pay any fees or commissions to any broker, dealer or other person for soliciting elections to exchange options in connection with the Offer.

16. Additional Information.

We have filed with the SEC a Tender Offer Statement on Schedule TO, of which this Offer to Exchange is a part. This Offer to Exchange does not contain all of the information contained in the Schedule TO and the exhibits to the Schedule TO. We recommend that, in addition to this Offer to Exchange and the letter of transmittal, you review the following materials that we have filed with the SEC before making a decision on whether to elect to exchange your options:

- (a) Our Annual Report on Form 10-K for the year ended December 31, 2007, filed with the SEC on March 12, 2008, a copy of which is included with this Offer to Exchange.

(b) Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2008, June 30, 2008 and September 30, 2008, filed with the SEC on May 8, 2008, August 7, 2008 and November 6, 2008, respectively, copies of which are included with this Offer to Exchange.

(c) Our Current Reports on Form 8-K filed with the SEC on February 29, 2008, March 12, 2008, April 18, 2008, May 7, 2008, June 17, 2008, July 14, 2008, August 7, 2008, August 20, 2008, September 2, 2008, September 11, 2008, September 17, 2008, October 14, 2008, October 23, 2008, November 19, 2008 and November 21, 2008.

(d) The description of our common stock, par value \$0.001 per share, set forth in our registration statements filed pursuant to Section 12 of the Securities Exchange Act of 1934, and any amendment or report filed for the purpose of updating such descriptions.

Each of the above filings (except for information in Current Reports on Form 8-K concerning financial results) is incorporated by reference into this Offer to Exchange and into the Schedule TO filed by us with the SEC on January 12, 2009 and, along with all of our other annual, quarterly and current reports, our proxy statements and our other SEC filings, can be accessed electronically on the SEC's website at www.sec.gov.

In addition, each of these filings may be examined, and copies may be obtained, at the SEC's public reference rooms at Station Place, 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at (800) SEC-0330.

Our common stock is quoted on the NASDAQ Capital Market under the symbol "THLD" and our SEC filings can be read at the following NASDAQ address: NASDAQ Operations, 1735 K Street, N.W., Washington, D.C. 20006.

We will also provide, without charge, to each person to whom a copy of this Offer to Exchange is delivered, upon the written or oral request of any such person, a copy of any or all of the documents to which we have referred you, other than exhibits to such documents (unless such exhibits are specifically incorporated by reference into such documents). Requests should be directed to: Threshold Pharmaceuticals, Inc., Attention: Senior Director, Finance and Controller, 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 or by calling us at (650) 474-8200 between the hours of 9:00 a.m. and 5:00 p.m., Pacific Standard Time. The materials are also available on our website at www.thresholdpharm.com.

As you read the foregoing documents, you may find some inconsistencies in information from one document to another. If you find inconsistencies between the documents, or between a document and this Offer to Exchange, you should rely on the statements made in the most recent document.

The information contained in this Offer to Exchange about Threshold should be read together with the information contained in the documents to which we have referred you.

17. Certain Risks of Participating in the Offer.

Participation in the Offer involves a number of potential risks, including those described below. This section briefly highlights only some of the risks and is necessarily incomplete. Eligible Persons should carefully consider these and other risks and are encouraged to speak with an investment and tax advisor as necessary before deciding to participate in the Offer. In addition, we strongly urge you to read this Offer to Exchange carefully before deciding to participate in the Offer.

If our stock price increases after the commencement of the Offer, your cancelled Current Options might have been worth more than the Replacement Options that you will receive in exchange for them.

For example, if you tender a vested Current Option with a \$1.50 exercise price, and Threshold's common stock appreciates to \$2.00 per share when the unvested Replacement Options are granted, your unvested Replacement Option will have a higher exercise price than your vested Current Option.

If your employment terminates after we cancel options tendered for exchange but prior to the grant of the Replacement Options, you will receive neither the Replacement Options nor the return of your cancelled Current Options.

Once your Current Options are cancelled, you will no longer have any rights with respect to these options. Accordingly, if your employment terminates for any reason prior to the grant of the Replacement Options, you will not have the benefit of either the cancelled Current Options or the Replacement Options.

If your employment terminates after we grant Replacement Options, you will forfeit your Replacement Options that are invested at the time of your termination.

For example, if you exchange a fully vested Current Option to receive an unvested Replacement Option, only one-half of which is vested at the time Threshold terminates your employment or service, you will forfeit the unvested portion (one-half) of your Replacement Option.

Business-Related Risks.

The risk factors relating to Threshold's business and prospects included under Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008 are incorporated herein by reference. A copy of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, along with other SEC filings as indicated in Section 9 above, is included with this Offer to Exchange.

18. Miscellaneous.

This Offer to Exchange and our reports filed with the SEC referred to above may contain forward-looking statements. When used in this Offer to Exchange and our reports filed with the SEC or elsewhere by management from time to time, the words "believe," "anticipate," "intend," "plan," "estimate," "expect," and similar expressions are forward-looking statements. Such forward-looking statements are based on current expectations. Forward-looking statements made in this report include, for example, statements about:

- the progress of our clinical programs, including estimated milestones;
- estimates of future performance, capital requirements and needs for financing;
- uncertainties associated with obtaining and enforcing patents and other intellectual property rights; and
- the costs and timing of obtaining drug supply for our pre-clinical and clinical activities.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual events or results may differ materially from those discussed in the forward-looking statements as a result of various factors. For a more detailed discussion of the potential risks and uncertainties that may impact their accuracy, see Section II.A of this Offer to Exchange entitled "Certain Risks of Participating in the Offer" and the "Risk Factors" section under Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2008. Forward-looking statements reflect our view only as of the date of the report in which they are contained. We undertake no obligation to update any forward-looking statements. You should also carefully consider the factors set forth in other reports or documents that we file from time to time with the SEC.

Many factors may cause actual results to differ materially from those expressed or implied by the forward-looking statements contained in this Offer to Exchange.

We have not authorized any person to make any recommendation on our behalf as to whether you should elect to exchange or refrain from exchanging your options pursuant to the Offer. You should rely only on the information contained in this document, in the related letter of transmittal or other information to which we have referred you. We have not authorized anyone to give you any information or to make any representations in connection with the Offer other than the information and representations contained in this document, in the related letter of transmittal or other information to which we have referred you. If any other person makes any recommendation or representation to you or gives you any information, you must not rely upon that recommendation, representation or information as having been authorized by us.

Threshold Pharmaceuticals, Inc.

January 12, 2009

SCHEDULE A

CONDITIONS OF THE OFFER

Notwithstanding any other provision of the Offer, we will not be required to accept any options tendered for exchange, and we may terminate or amend the Offer, or postpone our acceptance and cancellation of any options tendered for exchange, in each case subject to certain limitations and our reasonable discretion, if at any time on or after January 12, 2009 and prior to the Expiration Date, any of the following events has occurred or has been determined by us to have occurred (provided, however, that any act or omission to act by us or the occurrence of circumstances within our control cannot be a condition affecting the completion of the Offer):

(a) there shall have been threatened or instituted or be pending any action or proceeding by any government or governmental, regulatory or administrative agency, authority or tribunal or any other person, domestic or foreign, before any court, authority, agency or tribunal that directly or indirectly challenges the making of the Offer, the acquisition of some or all of the options elected for exchange pursuant to the Offer or the issuance of Replacement Options, or otherwise relates in any manner to the Offer or that, in our reasonable judgment, could materially and adversely affect the business, condition (financial or other), income, operations or prospects of Threshold, or otherwise materially impair in any way the contemplated future conduct of our business or materially impair the contemplated benefits of the Offer to us;

(b) there shall have been any action threatened, pending or taken, or approval withheld, or any statute, rule, regulation, judgment, order or injunction threatened, proposed, sought, promulgated, enacted, entered, amended, enforced or deemed to be applicable to the Offer or us, by any court or any authority, agency or tribunal that would or is likely to:

(i) make the acceptance for exchange of, or issuance of Replacement Options for, some or all of the options tendered for exchange illegal or otherwise restrict or prohibit consummation of the Offer;

(ii) delay or restrict our ability, or render us unable, to accept for exchange or issue Replacement Options for some or all of the options tendered for exchange; or

(iii) materially and adversely affect the business, condition, income, operations or prospects of Threshold;

(c) there shall have occurred:

(i) any general suspension of trading in, or limitation on prices for, securities on any national securities exchange or in the over-the-counter market;

(ii) the declaration of a banking moratorium or any suspension payments in respect of banks in the United States, whether or not mandatory;

(iii) the commencement or escalation of a war, armed hostilities or other international or national crisis, directly or indirectly involving the United States, including acts of terrorism, the wars in Iraq and Afghanistan and the global war on terrorism;

(iv) the occurrence of a major earthquake or natural disaster;

(v) any limitation, whether or not mandatory, by any governmental, regulatory or administrative agency or authority that affects the extension of credit by banks or other lending institutions in the United States;

(vi) any decrease of greater than 50% of the market price of the shares of our common stock or any change in the geopolitical, political, market, economic or financial conditions in the United States or abroad that is likely to have a material adverse effect on the business, condition, income, operations or prospects of Threshold. or on the trading in our common stock;

(vii) in the case of any of the foregoing existing at the time of the commencement of the Offer, a material acceleration or worsening thereof; or

(viii) any decline in either the Dow Jones Industrial Average or the Standard and Poor's Index of 500 Companies by an amount in excess of 10% measured during any time period after the close of business on January 12, 2009;

(d) there shall have occurred any change in generally accepted accounting standards which could or would require us for financial reporting purposes to record more compensation expense than initially anticipated against our earnings in connection with the Offer; or

(e) the commencement a tender or exchange offer with respect to some or all of our common stock, or a merger or acquisition proposal concerning Threshold, shall have been proposed, announced or made by another person or entity or shall have been publicly disclosed, or we shall have learned that:

(i) any person, entity or group within the meaning of Section 13(d)(3) of the Securities Exchange Act, shall have acquired or proposed to acquire beneficial ownership of more than 5% of the outstanding shares of our common stock, or any new group shall have been formed that beneficially owns more than 5% of the outstanding shares of our common stock, other than any such person, entity or group that has filed a Schedule 13D or Schedule 13G with the Securities and Exchange Commission on or before February 12, 2009;

(ii) any such person, entity or group that has filed a Schedule 13D or Schedule 13G with the Securities and Exchange Commission on or before February 12, 2009 shall have acquired or proposed to acquire beneficial ownership of an additional 2% or more of the outstanding shares of our common stock; or

(iii) any person, entity or group shall have filed a Notification and Report Form under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, or made a public announcement reflecting an intent to acquire us or any of the assets or securities of us.

The conditions to the Offer are for our benefit. We may assert them in our sole discretion, provided, however, that any act or omission to act by us or the occurrence of circumstances within our control cannot be a condition affecting the completion of the Offer. We may waive them, in whole or in part, at any time and from time to time prior to the Expiration Date, in our discretion, whether or not we waive any other condition to the Offer. Our failure at any time to exercise any of these rights will not be deemed a waiver of any such rights; provided, however, that our acceptance of options tendered for exchange pursuant to the Offer shall constitute a waiver of the occurrence of a condition specified above. The waiver of any of these rights with respect to particular facts and circumstances will not be deemed a waiver with respect to any other facts and circumstances. When a condition refers to an impairment of the benefits of the Offer to us, an impairment includes a decrease in our ability to incentivize employees, consultants, executive officers and directors to continue their service to us and a decrease in our ability to minimize potential dilution to our stockholders.

THRESHOLD PHARMACEUTICALS, INC.

QUESTION AND ANSWER DOCUMENT

**FOR EMPLOYEES, CONSULTANTS, EXECUTIVE OFFICERS AND DIRECTORS
OF THRESHOLD PHARMACEUTICALS, INC.**

The following are answers to some of the questions that you may have about the Option Exchange Program. We urge you to read carefully the Offer to Exchange document because the information in this summary is not complete, and additional important information is contained in the Offer to Exchange document. We have included section references to the Offer to Exchange where you can find a more complete description of the topics in this summary. We also urge you to review the information in our Annual Report on Form 10-K for the year ended December 31, 2007, our Quarterly Reports on Form 10-Q for 2008, and the proxy statement distributed in connection with our Annual Stockholder Meeting held on May 13, 2008, as these documents contain important financial information and other relevant information about us. Copies of our Annual Report on Form 10-K for the year ended December 31, 2007 and our Quarterly Reports on Form 10-Q for 2008 are included with the Offer to Exchange. All of these documents may be obtained without charge from us or from the Securities and Exchange Commission. See "The Offer to Exchange: Section 16, Additional Information."

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Questions About the Option Exchange Program

1. What Is the Option Exchange Program?

The Option Exchange Program (sometimes referred to herein as the “Offer”) is a voluntary program that offers eligible employees, consultants, executive officers and directors of Threshold the opportunity to make a one-time election to cancel certain outstanding stock options (the “Current Options”) under the Threshold Pharmaceuticals, Inc. 2004 Amended and Restated Equity Incentive Plan (the “Plan”) and exchange them for an equal number of new unvested stock options (the “Replacement Options”) at a new exercise price. The Replacement Options will have a new vesting schedule, thus requiring employees, consultants and executive officers to continue their employment with, or service to, us to realize any benefit from the Replacement Options. The period during which you may determine whether to accept our offer to participate in the program (the “Offering Period”) will open on January 12, 2009, and will close at 5:00 p.m. Pacific Standard Time on February 12, 2009 (the “Expiration Date”), unless the Offering Period is extended. If you decide to participate in the Offer and your tender is accepted by us, your Current Options tendered for exchange will be cancelled on the first business day following the Expiration Date (the “Cancellation Date”). The Replacement Options will be granted on or about the date after the Cancellation Date (the “Grant Date”). Assuming we do not extend the Expiration Date, we currently expect the Grant Date to be on or about February 16, 2009.

2. Why Are We Implementing the Program?

Our Board of Directors approved this program to increase the motivational and retention value of our stock option program and to decrease the potentially dilutive effect that would be created by the issuance of new options to employees, consultants, executive officers and directors with exercise prices at current fair values in addition to existing options that have exercise prices substantially above the current market price of our common stock. (See Section 3 of Part II of the Offer to Exchange.)

3. Do I Have to Participate in the Program?

No, the program is strictly voluntary. Eligible employees, consultants, executive officers and directors have a window of at least twenty (20) U.S. business days in which to decide whether to participate in the Offer. For purposes of the Offer, a “business day” means any day other than a Saturday, Sunday or U.S. federal holiday and consists of the time period from 12:01 a.m. through 12:00 midnight, Eastern Standard Time. The Offering Period begins on January 12, 2009, and we currently anticipate that it will close at 5:00 p.m. Pacific Standard Time on February 12, 2009.

4. Who is Eligible to Participate?

We are offering the Option Exchange Program to all of our existing employees, consultants, executive officers and directors who, as of the start of the Offering Period, hold eligible stock options, whether vested or unvested (“Eligible Persons”). (See Section 1 of Part II of the Offer to Exchange.)

Additionally, an employee, consultant, executive officer or director who tenders his or her options for exchange will receive Replacement Options in exchange only if he or she is employed by us, or is providing service to us, on the date that the Replacement Options are granted.

5. What Securities Are We Offering to Exchange?

We are offering to exchange any outstanding, unexercised options to purchase shares of our common stock granted between February 10, 2005 and December 31, 2008 under the Plan, whether vested or unvested, and held by Eligible Persons. (See Section 2 of Part II of the Offer to Exchange.)

6. If I Elect to Participate, Must I Exchange All of My Eligible Outstanding Options?

No. Eligible Persons may elect to exchange, on a grant-by-grant basis, eligible options as they like. However, Eligible Persons may not partially tender an individual option grant. (See Section 2 of Part II of the Offer to Exchange.)

7. May I Tender Options that I Received in Connection with the 2006 Option Exchange Program?

Yes. You may tender any options that you may have received on or about September 27, 2006 in connection the prior option exchange program, so long as these options are otherwise eligible to be tendered in the Offer.

8. Will the Company Offer a Similar Option Exchange Program in the Future?

There can be no assurance that the Company will offer another option exchange program in the future.

9. May I Tender Options that I Have Already Exercised?

No. The Offer only pertains to unexercised, outstanding options and does not in any way apply to shares purchased, whether upon the exercise of options or otherwise. If you have exercised an option in its entirety, that option is no longer outstanding and is therefore not subject to the Offer. If you have exercised a Current Option in part, the remaining unexercised portion of that option is outstanding and may be tendered for exchange pursuant to the Offer. (See Section 2 of Part II of the Offer to Exchange.)

10. How Can I Find Out the Details of My Options that are Eligible for the Offer?

If you haven't already, you will soon receive a personal stock option statement from Threshold detailing your outstanding options that are eligible for the Option Exchange Program.

11. What if I Quit or Am Terminated Prior to the End of the Offering Period?

If you are not employed by, or providing services to, Threshold on the Expiration Date, you will not be an Eligible Person and, as a result, you will not be eligible to participate in the Offer. If you tender your Current Options prior to the effective date of your termination (but prior to the end of the Offering Period), your tender will be automatically withdrawn. You may exercise your Current Options in accordance with their terms to the extent they are vested. Since your tendered Current Options will automatically be withdrawn, you will not receive any Replacement Options in exchange for your Current Options.

12. What if I Quit or Am Terminated After the Expiration of the Offering Period but Prior to the Grant of the Replacement Options?

If, after the expiration of the Offering Period but prior to the grant of the Replacement Options, you cease to be an employee, consultant, executive officer or director of Threshold, you will not receive any Replacement Options or any other payment or consideration in exchange for your tendered Current Options that have been accepted for exchange and cancelled. This rule applies regardless of the reason for your termination of employment - *i.e.*, whether it is a result of voluntary resignation, involuntary termination, retirement, death or disability. (See Section 6 of Part II of the Offer to Exchange.)

13. What if I Am on a Leave of Absence During the Offering Period or Any Time Prior to the Time That the Replacement Options Are Granted?

Employees, consultants, executive officers and directors who are on authorized leaves of absence will have the same opportunity to participate in the Offer as other employees, consultants, executive officers and directors. However, if you are on a leave at any point in the process, you will need to keep Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, informed as to how best to contact you (*e.g.*, e-mail, U.S. mail) so that notices regarding the Offer will reach you in a timely fashion. Please note that if you elect to participate in the Offer and your employment with or service to Threshold terminates at any time after the end of the Offering Period, but prior to the grant of Replacement Options, you will forfeit any options that you sought to exchange and you will not receive Replacement Options. Generally speaking, you will have the standard ninety (90) days following termination to exercise any vested options that you did not elect to exchange.

14. What if I Change My Country of Residence During the Offering Period or Prior to the Time That the Replacement Options Are Granted?

If, during the Offering Period, you change your place of residence to a country other than the United States, your tender will automatically be withdrawn if the Company determines that the application of local rules would prohibit or make impractical the grant of Replacement Options. In the event your tendered Current Options are automatically withdrawn, you will not receive any Replacement Options in exchange for your Current Options. (See Section 3 of Part II of the Offer to Exchange.)

If, after the expiration of the Offering Period but prior to the grant of the Replacement Options, you change your place of residence to a country other than the United States, you may not have a right to any Replacement Options that would have been granted to you on the Grant Date and you will not have a right to any stock options that were previously cancelled. In some countries other than the United States, the application of local rules may prohibit or make impractical the grant of Replacement Options. The Company will determine, in its sole discretion, whether or not you reside in a non-U.S. jurisdiction where the application of local rules prohibit or make impractical the grant of Replacement Options. (See Section 6 of Part II of the Offer to Exchange.)

15. How Many Replacement Options Will I Receive in Exchange for My Current Options?

The number of shares subject to a Replacement Option will be the same number of shares of common stock that you tendered pursuant to a Current Option. For example, if you exchange a partially vested Current Option with respect to 1,000 shares of common stock, the Current Option will be replaced with an unvested Replacement Option to acquire 1,000 shares of common stock. (See Section 2 of Part II of the Offer to Exchange.)

16. What Happens if I Choose Not to Participate in the Offer?

If you choose not to tender any of your Current Options for exchange, your Current Options will remain outstanding and retain their current exercise prices and other current terms.

17. When Will I Receive My Replacement Options?

We will grant the Replacement Options promptly after the date we cancel the Current Options accepted for exchange. If we cancel the tendered Current Options on Friday, February 13, 2009, which is the date we currently anticipate, we expect the Replacement Options will be granted on or about Monday, February 16, 2009. **You must continue to be an Eligible Person of Threshold on the Grant Date to be eligible to receive the Replacement Options.** (See Section 6 of Part II of the Offer to Exchange.)

18. What Will the Exercise Price of the Replacement Options Be?

The Replacement Options will have an exercise price equal to the closing sales price of our common stock on the Grant Date. **The Replacement Options may have a higher exercise price than some or all of your Current Options that are cancelled.** (See Section 8 of Part II of the Offer to Exchange.)

19. When Will the Replacement Options Vest?

Each Replacement Option, including all Replacement Options issued in exchange for Current Options that are fully vested as of the Cancellation Date, will be entirely unvested on the Grant Date. Each Replacement Option will vest pro-rata on a monthly basis such that each Replacement Option will be fully vested on the later of (a) January 12, 2010 and (b) the same date as the Current Option would have become fully vested had it not been exchanged, subject to the Eligible Person's continued service with the Company.

Example: Assume an Eligible Person tenders a partially vested Current Option to purchase 10,000 shares of Threshold common stock that, in accordance with its original vesting schedule, would have become fully vested on March 1, 2012. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on March 1, 2012, all 10,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

Example: Assume an Eligible Person tenders a fully vested Current Option to purchase 8,000 shares of Threshold common stock. The Replacement Option will be entirely unvested on the Grant Date but will vest pro-rata on a monthly basis such that on January 12, 2010, all 8,000 shares subject to the Replacement Option will be vested, subject to the Eligible Person's continued service with the Company.

20. When Will the Replacement Options Expire?

The expiration date, or term, of an option is the length of time during which it may be exercised. Replacement Options will maintain their original term. For example, if you have a Current Option with a ten (10) year term that you elect to exchange and, at the time the Replacement Option is granted, one (1) year has passed since you received the original grant, the Replacement Option will have a term of nine (9) years. (See Section 8 of Part II of the Offer to Exchange.) Of course, as is true for your Current Options, your Replacement Options can terminate earlier in certain circumstances. For example, if your employment or service terminates for other than death or disability, your vested options typically expire after ninety (90) days if they are not exercised prior to that time.

21. Can I Change My Mind After I've Elected to Participate in the Offer and Keep My Current Options?

Although you may withdraw your tendered Current Option prior to the close of the Offering Period (see Question 25), once the Offering Period closes (which we currently anticipate will occur on February 12, 2009), your election to participate is irrevocable. (See Section 5 of Part II of the Offer to Exchange.)

22. Why Can't Threshold Just Grant Me More Options Without My Current Options Being Cancelled?

We strive to balance the need for a competitive compensation package for our employees, consultants, executive officers and directors with the interests of our stockholders. Because of the number of options that we have currently outstanding, a large grant of Replacement Options would be dilutive to our stockholders.

23. Will I Have to Pay Taxes if I Exchange My Current Options?

If you exchange your Current Options for Replacement Options, you will not be required under current U.S. law to recognize income for U.S. Federal income tax purposes at the time of the tender or upon our acceptance and cancellation of the Current Options. We believe that the exchange will be treated as a non-taxable exchange in the U.S. Further, at the Grant Date of the Replacement Options, we believe that you will not be required under current U.S. law to recognize income for U.S. Federal income tax purposes. (See Section 13 of Part II of the Offer to Exchange.)

However, all Eligible Persons should consult with their own personal tax advisor regarding their personal situation before deciding whether to participate in the Option Exchange Program.

24. What Happens if Threshold Merges Into or Is Acquired By Another Company?

If we merge into or are acquired by another company prior to the end of the Offering Period, you may withdraw your tendered Current Options and retain all the rights afforded you to acquire our common stock under the existing option agreements evidencing those options.

If a merger or similar agreement is effective after the grant of the Replacement Options, the Replacement Options will be subject to the change of control provisions under the Plan. The Plan provides that, in the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, all of the shares subject to each outstanding option shall become vested and exercisable, unless the acquiring company assumes or substitutes the outstanding option.

25. When Does the Offer Expire? Can the Offer Be Extended and, If So, How Will I Be Notified if It Is Extended?

We currently expect the Offering Period to expire on February 12, 2009, at 5:00 p.m., Pacific Standard Time, unless we extend the Offering Period. Although we do not currently intend to do so, we may, in our sole discretion, extend the Offering Period at any time. If the Offering Period is extended, we will make an announcement of the extension no later than 9:00 a.m., Pacific Standard Time, on the first business day immediately following the previously scheduled Expiration Date. If the Offering Period is extended, then the Cancellation Date for tendered Current Options accepted for exchange and the Grant Date of the Replacement Options will be delayed. (See Section 2 of Part II of the Offer to Exchange.)

26. What Do I Need to Do If I Want to Participate In the Offer?

To participate in the Offer, you must properly complete, duly execute and deliver to us the letter of transmittal, or a facsimile thereof, along with any other required documents. We must receive all of the required documents at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller) by 5:00 p.m., Pacific Standard Time, on February 12, 2009. **Absolutely no late forms will be accepted.** (See Section 4 of Part II of the Offer to Exchange.)

THE METHOD OF DELIVERY OF ALL DOCUMENTS IS AT THE ELECTION AND RISK OF THE TENDERING OPTION HOLDER. IF DELIVERY IS BY MAIL, WE RECOMMEND THAT YOU USE REGISTERED MAIL WITH RETURN RECEIPT REQUESTED. SINCE THE LETTER OF TRANSMITTAL NEEDS TO BE DULY EXECUTED, ONLY FACSIMILE, MAIL OR HAND DELIVERY, BUT NOT E-MAIL, WILL BE CONSIDERED PROPER DELIVERY. IN ALL CASES, YOU SHOULD ALLOW SUFFICIENT TIME TO ENSURE TIMELY DELIVERY. THE REQUIRED DOCUMENTS MUST BE RECEIVED BY THE EXPIRATION DATE. A POSTMARK PRIOR TO THE EXPIRATION DATE WILL NOT ENSURE TIMELY DELIVERY.

We will strictly enforce the Offer Period. We reserve the right to reject any or all options tendered for exchange that we determine are not in appropriate form or that we determine, in our sole discretion, are unlawful to accept. Subject to our rights to extend, terminate, or amend the Offer, we currently expect that we will accept and subsequently cancel all options properly tendered for exchange.

27. Can I Change My Election (i.e., Withdraw Options That I've Previously Elected to Exchange)?

You can withdraw any options that you previously tendered for exchange at any time before 5:00 p.m., Pacific Standard Time, on February 12, 2009. If we extend the Offering Period beyond that time, you can withdraw your options elected for exchange at any time until the extended Expiration Date. (See Section 5 of Part II of the Offer to Exchange.)

To withdraw options elected for exchange, you must deliver to us a written notice of withdrawal, or a facsimile thereof, with the required information. The notice of withdrawal must specify the name of the option holder who tendered the options to be withdrawn, the grant date, exercise price and total number of option shares subject to each option to be withdrawn. We must receive the notice of withdrawal at Threshold Pharmaceuticals, Inc., 1300 Seaport Boulevard, Suite 500, Redwood City, California 94063 (attn: Senior Director, Finance and Controller), before the Expiration Date. Once you have withdrawn options, you can re-elect to exchange eligible Current Options only by again following the delivery procedure described in Question 24 before the Expiration Date.

28. Who Should I Contact if I Have Additional Questions?

We will be conducting one or meetings with Eligible Persons to answer your questions about the Option Exchange Program and address your concerns. We will hold a meeting on Thursday, January 15, 2009 at 1:00 p.m., Pacific Standard Time, at Threshold's principal executive offices located at 1300 Seaport Boulevard, Suite 500, Redwood City, California to explain the program in detail and to answer any questions. Additional meetings will be scheduled if needed.

Otherwise, please direct any questions or requests for additional copies of documents referred to in these materials to Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, by e-mail at jfernandes@thresholdpharm.com or by telephone at (650) 474-8200. Please note, however, that nobody at Threshold, including Mr. Fernandes, can provide you with any advice regarding whether you should participate in the Option Exchange Program.

END OF QUESTION AND ANSWER DOCUMENT

THRESHOLD PHARMACEUTICALS, INC.

LETTER OF TRANSMITTAL

PURSUANT TO THE OFFER TO EXCHANGE DATED JANUARY 12, 2009

TO TENDER CERTAIN OPTIONS

TO PURCHASE SHARES OF COMMON STOCK

FOR REPLACEMENT OPTIONS UNDER THE

THRESHOLD PHARMACEUTICALS INC.

2004 AMENDED AND RESTATED EQUITY INCENTIVE PLAN

THE OFFER AND WITHDRAWAL RIGHTS EXPIRE AT

5:00 P.M., PACIFIC STANDARD TIME, ON FEBRUARY 12, 2009,

UNLESS THE OFFER IS EXTENDED.

To: Joel A. Fernandes
Threshold Pharmaceuticals, Inc.
1300 Seaport Boulevard, Suite 500
Redwood City, California 94063
Telephone: (650) 474-8200
Facsimile: (650) 474-2529

**DELIVERY OF THIS LETTER OF TRANSMITTAL TO AN ADDRESS
OTHER THAN AS SET FORTH ABOVE OR TRANSMISSION VIA FACSIMILE
TO A NUMBER OTHER THAN AS SET FORTH ABOVE
WILL NOT CONSTITUTE A VALID DELIVERY.**

To Threshold Pharmaceuticals, Inc.:

Upon the terms and subject to the conditions set forth in the Offer to Exchange dated January 12, 2009 (the "Offer to Exchange"), my receipt of which I hereby acknowledge, and in this Letter of Transmittal (this "Letter" which, together with the Offer to Exchange and instructions attached hereto, as they may be amended from time to time, constitutes the "Offer"), I, the undersigned, hereby tender to Threshold Pharmaceuticals, Inc., a Delaware corporation (the "Company"), the options to purchase shares ("Option Shares") of common stock, par value \$0.001 per share, of the Company (the "Common Stock") specified on **Schedule A** attached hereto (the "Current Options") in exchange for an equal number of unvested "Replacement Options" to purchase shares of Common Stock issued under the Company's 2004 Amended and Restated Equity Incentive Plan (the "Plan").

Subject to, and effective upon, the Company's acceptance for exchange of the Current Options tendered herewith in accordance with the terms and subject to the conditions of the Offer (including, if the Offer is extended or amended, the terms and conditions of any such extension or amendment), I hereby sell, assign and transfer to, or upon the order of, the Company all right, title and interest in and to the portion of the Current Options that I am tendering hereby. I acknowledge that the Company has advised me to consult with my own legal, tax and financial advisors as to the consequences of participating or not participating in the Offer.

I hereby represent and warrant that I have full power and authority to tender the Current Options tendered hereby and that, when and to the extent such Current Options are accepted for exchange by the Company, such Current Options will be free and clear of all security interests, liens, restrictions, charges, encumbrances, conditional sales agreements or other obligations relating to the sale or transfer thereof, other than pursuant to the applicable option agreement, and such Current Options will not be subject to any adverse claims. Upon request, I will execute and deliver any additional documents deemed by the Company to be necessary or desirable to complete the exchange of the Current Options I am tendering hereby.

All authority herein conferred or agreed to be conferred shall not be affected by, and shall survive, my death or incapacity, and all of my obligations hereunder shall be binding upon my heirs, personal representatives, successors and assigns. Except as stated in the Offer, this tender is irrevocable.

By execution hereof, I understand that tenders of Current Options pursuant to the procedure described in Section 4 of the Offer to Exchange and in the instructions to this Letter will constitute my acceptance of the terms and conditions of the Offer. The Company's acceptance for exchange of Current Options tendered pursuant to the Offer will constitute a binding agreement between the Company and me upon the terms and subject to the conditions of the Offer.

The name of the registered holder of the Current Options tendered hereby appears below exactly as it appears on the option agreement or agreements representing such Current Options. By completing the table set forth on **Schedule A** attached hereto, I understand that all of Current Options properly tendered prior to the "Expiration Date" (as defined in the following sentence) and not properly withdrawn will be exchanged for Replacement Options, upon the terms and subject to the conditions of the Offer, including the conditions described in Section 2 and Schedule A of the Offer to Exchange. The term "Expiration Date" means 5:00 p.m., Pacific Standard Time, on February 12, 2009, unless and until the Company, in its sole discretion, has extended the period of time during which the Offer will remain open, in which event the term "Expiration Date" refers to the latest time and date at which the Offer, as so extended, expires.

I recognize that, under certain circumstances set forth in the Offer to Exchange, the Company may terminate or amend the Offer and postpone its acceptance and cancellation of any Current Options tendered for exchange. In any such event, I understand that the Current Options delivered herewith, but not accepted for exchange, will be returned to me at the address indicated below.

All capitalized terms used in this Letter but not defined herein shall have the meaning ascribed to them in the Offer to Exchange.

I understand and agree to all of the terms and conditions of the Offer.

Furthermore, in participating in the Offer, I acknowledge that: (1) the Offer is established voluntarily by the Company, it is discretionary in nature and it may be extended, modified, suspended or terminated by the Company at any time, as provided in the Offer; (2) the grant of the right to receive Replacement Options after the Cancellation Date of the Current Options, subject to conditions stated in the Offer, is voluntary and does not create any contractual or other right to receive future benefits; (3) decisions with respect to future grants under any equity incentive plan of the Company, if any, will be at the sole discretion of the Company; (4) my participation in the Offer shall not create a right to employment or be interpreted to form an employment agreement with the Company and shall not interfere with the ability of Threshold to terminate my employment or other relationship with Company (as applicable) at any time with or without cause; (5) I am voluntarily participating in the Offer; (6) the right to receive Replacement Options after the date of cancellation of the Current Options, subject to the conditions stated in the Offer, from the Company as a result of participating in the Offer is an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Company which is outside the scope of my employment or consulting contract or offer letter, if any, and is not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments; (7) the future value of the Common Stock is unknown and cannot be predicted with certainty; (8) if I participate in the Offer and receive Replacement Options, the exercise price of the Replacement Options may be higher

than the exercise price of the Current Options; (9) no claim or entitlement to compensation or damages arises if the exercise price for the Replacement Options is greater than my Current Options and I irrevocably release the Company from any such claim that may arise; (10) I will not be granted Replacement Options or any compensation in lieu of Replacement Options if I terminate employment or my services to Threshold or am terminated from employment with or providing services to the Company after the Cancellation Date of the Current Options but prior to the date that the Company grants Replacement Options pursuant to the Offer; and (11) the Replacement Options will be subject to the terms and conditions set forth in a new option agreement between the Company and me that will be sent to me after the grant of Replacement Options.

HOLDER PLEASE SIGN HERE

(See Instructions 1 and 4 attached hereto)

You must complete and sign the following as your name appears on the option agreement or agreements evidencing the Current Options you are tendering. If the signature is by a trustee, executor, administrator, guardian, attorney-in-fact, officer of a corporation or another person acting in a fiduciary or representative capacity, please set forth the signer's full title and include with this Letter proper evidence of the authority of such person to act in such capacity.

SIGNATURE OF OWNER:

/s/ _____
(Signature of Holder or Authorized Signatory)

Date: _____

Name: _____

Address: _____

(include ZIP code)

Telephone No.: _____
(include area code)

E-Mail: _____

INSTRUCTIONS

FORMING PART OF THE TERMS AND CONDITIONS OF THE OFFER

1. *Delivery of Letter of Transmittal.* A properly completed and duly executed original of this Letter (or a facsimile thereof), and any other documents required by this Letter, must be received by the Company at its address set forth on the front cover of this Letter on or before the Expiration Date.

THE METHOD OF DELIVERY OF ALL DOCUMENTS, INCLUDING A NOTICE OF WITHDRAWAL AND ANY OTHER REQUIRED DOCUMENTS, IS AT THE ELECTION AND RISK OF THE TENDERING OPTION HOLDER. IF DELIVERY IS BY MAIL, WE RECOMMEND THAT YOU USE REGISTERED MAIL WITH RETURN RECEIPT REQUESTED. BECAUSE THE LETTER OF TRANSMITTAL NEEDS TO BE DULY EXECUTED, ONLY FACSIMILE, MAIL OR HAND DELIVERY, BUT NOT E-MAIL, WILL BE CONSIDERED PROPER DELIVERY. IN ALL CASES, YOU SHOULD ALLOW SUFFICIENT TIME TO ENSURE TIMELY DELIVERY. THE REQUIRED DOCUMENTS MUST BE RECEIVED BY THE EXPIRATION DATE. A POSTMARK PRIOR TO THE EXPIRATION DATE WILL NOT ENSURE TIMELY DELIVERY.

Tenders of Current Options made pursuant to the Offer may be withdrawn at any time prior to the Expiration Date. If the Offer is extended by the Company beyond the original Expiration Date, you may withdraw your tendered options at any time until the extended expiration of the Offer. To withdraw tendered Current Options you must deliver a written notice of withdrawal, or a facsimile thereof, with the required information to the Company while you still have the right to withdraw the tendered Current Options. Withdrawals may not be rescinded and any Current Options withdrawn will thereafter be deemed not properly tendered for purposes of the Offer unless such withdrawn Current Options are properly re-tendered prior to the Expiration Date by following the procedures described above.

The Company will not accept any alternative, conditional or contingent tenders. All tendering Option Holders, by execution of this Letter (or a facsimile of it), waive any right to receive notice of the acceptance of their tender, except as provided for in the Offer to Exchange.

2. *Inadequate Space.* If the space provided herein is inadequate, the information requested by the first table in this Letter regarding the Current Options to be tendered should be provided on a separate schedule attached hereto.

3. *Tenders.* If you intend to tender options pursuant to the Offer, you must complete the table set forth on **Schedule A** of this Letter by providing the following information for each Current Option that you intend to tender. You may only tender eligible options that were granted between February 10, 2005 and December 31, 2008. Tenders must be made on a grant-by-grant basis. For example, if you hold a Current Option with respect to 1,000 shares of common stock that is eligible for exchange, the Current Option with respect to all 1,000 shares of common stock must be tendered for exchange if you wish to receive a Replacement Option in respect of such Current Option.

4. *Signatures on This Letter of Transmittal.* If this Letter is signed by the holder of the Current Options, the signature must correspond with the name as written on the face of the option agreement or agreements to which the Current Options are subject.

If this Letter is signed by a trustee, executor, administrator, guardian, attorney-in-fact, officer of a corporation or other person acting in a fiduciary or representative capacity, such person should so indicate when signing, and proper evidence satisfactory to the Company of the authority of such person so to act must be submitted with this Letter.

5. *Requests for Assistance or Additional Copies.* Any questions or requests for assistance, as well as requests for additional copies of the Offer to Exchange or this Letter may be directed to Threshold Pharmaceuticals, Inc. (attn: Senior Director, Finance and Controller), at the address and telephone number given on the front cover of this Letter. Copies will be furnished promptly at the Company's expense.

6. *Irregularities.* All questions as to the number of Option Shares subject to Current Options to be accepted for exchange, and the validity, form, eligibility (including time of receipt) and acceptance for exchange of any tender of Current Options will be determined by the Company in its discretion, which determinations shall be final and binding on all parties. The Company reserves the right to reject any or all tenders of Current Options the Company determines not to be in proper form or the acceptance of which may, in the opinion of the Company's counsel, be unlawful. The Company also reserves the right to waive any of the conditions of the Offer and any defect or irregularity in the tender of Current Options, and the Company's interpretation of the terms of the Offer (including these instructions) will be final and binding on all parties. No tender of Current Options will be deemed to be properly made until all defects and irregularities have been cured or waived. Unless waived, any defects or irregularities in connection with tenders must be cured within such time as the Company shall determine. Neither the Company nor any other person is or will be obligated to give notice of any defects or irregularities in tenders, and no person will incur any liability for failure to give any such notice.

IMPORTANT: THIS LETTER (OR A FACSIMILE COPY THEREOF) TOGETHER WITH ALL OTHER REQUIRED DOCUMENTS MUST BE RECEIVED BY THE COMPANY, ON OR PRIOR TO THE EXPIRATION DATE. PLEASE NOTE THAT THESE INSTRUCTIONS NEED NOT BE SUBMITTED TO THE COMPANY.

7. *Important Tax Information.* You should refer to Section 13 "Material U.S. Federal Income Tax Consequences" of the Offer to Exchange, which contains important tax information.

Schedule A

OPTIONS ELIGIBLE FOR EXCHANGE

Name:

A	B	C	D	E	F
Date of Option Grant	Exercise Price of Option*	Number of Tended Option Shares Subject to Option Grant*	Option Number	Tendered For Exchange	Not Tendered For Exchange
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

* Adjusted for the 1-for-6 reverse split effective August 20, 2008

Please check the appropriate box in Column E or F for each applicable Option set forth in Column D.

IF YOU DO NOT WISH TO TENDER ANY OF YOUR OPTIONS LISTED IN COLUMN A, IT IS NOT NECESSARY FOR YOU TO RETURN THE LETTER OF TRANSMITTAL OF WHICH THIS SCHEDULE A IS A PART.

FORM OF EMAIL CONFIRMATION OF RECEIPT OF LETTER OF TRANSMITTAL

To: [Name of Tendering Option Holder]

Date: _____, 2009

Re: Confirmation of Receipt of Letter of Transmittal

This email confirms our receipt of your Letter of Transmittal, which sets forth your election to tender one or more of your eligible options for cancellation and corresponding grant of replacement options pursuant to the Threshold Option Exchange Program. This email does not serve as formal acceptance by Threshold Pharmaceuticals, Inc. of the options designated on your Letter of Transmittal for exchange, per the terms of the Offer to Exchange previously given to you and filed with the U.S. Securities and Exchange Commission.

A formal notice of the acceptance or rejection of your tendered options will be sent to you promptly after the expiration of the Offer to Exchange, which is currently scheduled to occur at 5:00 p.m., Pacific Standard Time, on February 12, 2009.

You may withdraw your election to exchange your options at any time prior to the expiration of the Offer to Exchange. If you wish to withdraw your tendered options, you must deliver your notice of withdrawal according to the procedures set forth in the Offer to Exchange.

If you have any questions, please contact Please contact Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, by telephone at (650) 474-8200 or by e-mail at jfernandes@thresholdpharm.com.

**LETTER OF WITHDRAWAL OF OPTIONS PREVIOUSLY TENDERED
PURSUANT TO THE OFFER TO EXCHANGE DATED JANUARY 12, 2009**

**THE OFFER AND WITHDRAWAL RIGHTS EXPIRE AT
5:00 P.M., PACIFIC STANDARD TIME, ON FEBRUARY 12, 2009,
UNLESS THE OFFER IS EXTENDED.**

To: Joel A. Fernandes
Threshold Pharmaceuticals, Inc.
1300 Seaport Boulevard, Suite 500
Redwood City, California 94063
Telephone: (650) 474-8200
Facsimile: (650) 474-2529

**DELIVERY OF THIS LETTER OF WITHDRAWAL TO AN ADDRESS
OTHER THAN AS SET FORTH ABOVE OR TRANSMISSION VIA FACSIMILE
TO A NUMBER OTHER THAN AS SET FORTH ABOVE
WILL NOT CONSTITUTE A VALID DELIVERY.**

Pursuant to the terms and subject to the conditions of the Offer to Exchange dated January 12, 2009 (the "Offer to Exchange") and this Letter of Withdrawal, I hereby withdraw my previous tender for cancellation of the options marked "Withdrawn For Exchange" to purchase shares of Threshold Pharmaceuticals, Inc. common stock, par value \$0.001 per share ("Option Shares") (to validly withdraw a previous tender of Option Shares for cancellation you must complete the following table):

Name:

A	B	C	D	E	F
Date of Option Grant	Exercise Price of Option*	Number of Tended Option Shares Subject to Option Grant*	Option Number	Withdrawn For Exchange	Not Withdrawn For Exchange
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

* As adjusted for the 1-for-6 reverse stock split effective August 20, 2008.

To Threshold Pharmaceuticals, Inc.:

Upon the terms and subject to the conditions set forth in the Offer to Exchange, my receipt of which I hereby acknowledge, and in this Letter of Withdrawal, I, the undersigned, hereby withdraw my previous tender to Threshold Pharmaceuticals, Inc., a Delaware corporation (the "Company"), of the Option(s), as specified in the table on page 1 of this Letter of Withdrawal (the "Withdrawn Options"). I understand that by withdrawing my previous tender of such Option(s), the tender with respect to such Option(s) will no longer be effective and if I later choose to have the Withdrawn Options tendered in the Offer to Exchange I must re-tender those Withdrawn Options in accordance with the terms of the Offer to Exchange prior to the Expiration Date. The term "Expiration Date" means 5:00 p.m., Pacific Standard Time, on February 12, 2009, unless and until the Company, in its sole discretion, has extended the period of time during which the Offer to Exchange will remain open, in which event the term "Expiration Date" refers to the latest time and date at which the Offer to Exchange, as so extended, expires.

I acknowledge that the Company has advised me to consult with my own legal, tax and financial advisors as to the consequences of participating or not participating in the Offer to Exchange and withdrawing my tendered Option Shares. All authority herein conferred or agreed to be conferred shall not be affected by, and shall survive, my death or incapacity, and all of my obligations hereunder shall be binding upon my heirs, personal representatives, successors and assigns. Except as stated in the Offer to Exchange, this withdrawal is irrevocable.

The name of the registered holder of the Withdrawn Options hereby appears below exactly as it appears on the option agreement or agreements representing such Withdrawn Options. By completing the table on page 1 of this Letter of Withdrawal, I have denoted each Option that I previously tendered and wish to withdraw.

I understand that this Letter of Withdrawal must be received by the Company at the address set forth on page 1 of this Letter of Withdrawal prior to the Expiration Date in order to be effective.

All capitalized terms used in this Letter of Withdrawal but not defined herein shall have the meaning ascribed to them in the Offer to Exchange.

I understand and agree to all of the terms and conditions of the Offer to Exchange.

HOLDER PLEASE SIGN HERE

You must complete and sign the following as your name appears on the option agreement or agreements evidencing the Option(s) you previously tendered in the Letter of Transmittal. If the signature is by a trustee, executor, administrator, guardian, attorney-in-fact, officer of a corporation or another person acting in a fiduciary or representative capacity, please set forth the signer's full title and include with this Letter of Withdrawal proper evidence of the authority of such person to act in such capacity.

SIGNATURE OF OWNER:

/s/ _____
(Signature of Holder or Authorized Signatory)

Date: _____

Name: _____

Address: _____

(include ZIP code)

Telephone No.: _____
(include area code)

E-Mail: _____

EMAIL COMMUNICATION TO ELIGIBLE OPTION HOLDERS

Re: IMPORTANT REMINDER: Threshold Option Exchange Program

As you know, on January 12, 2009, we announced the Threshold Option Exchange Program. There is only a short period of time left for you to elect to exchange your eligible options under the option exchange program. If you would like to exchange your eligible options for replacement options, Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, must receive your Letter of Transmittal no later than 5:00 p.m., Pacific Standard Time, on February 12, 2009.

If you have already delivered the Letter of Transmittal to Mr. Fernandes, you should have received an email confirmation of receipt. If you have not received the email confirmation, please contact Mr. Fernandes at the phone number or email address below.

If you do not wish to tender any of your eligible options for exchange, then no action is required on your part.

If you have any questions, or if you would like a paper copy of any of the documents delivered to you in connection with the stock option exchange program, please contact Mr. Fernandes by telephone at (650) 474-8200 or by email at jfernandes@thresholdpharm.com.

EMAIL COMMUNICATION REPORTING RESULTS TO TENDERING

OPTION HOLDERS

Dear Option Holder:

On behalf of Threshold Pharmaceuticals, Inc. (the "Company"), I am writing to provide you with the results of the Company's recent offer to exchange (the "Offer") outstanding options (the "Options") granted under the Threshold Pharmaceuticals, Inc. 2004 Amended and Restated Equity Incentive Plan (the "Plan") for new options the Company will grant under the Plan (the "Replacement Options"). All capitalized terms used in this letter which are not defined herein have the meanings given to those terms in the letter of transmittal (the "Letter of Transmittal") accompanying the Company's Offer to Exchange dated January 12, 2009 (the "Offer to Exchange").

The Offer expired at 5:00 p.m. Pacific Standard Time, on [____], 2009. Promptly following the expiration of the Offer and pursuant to the terms and conditions of the Offer, the Company accepted for exchange Current Options tendered to it for a total of [____] shares of Common Stock and canceled all such Options.

The Company has accepted for exchange and canceled the Current Options tendered by you as set forth on Attachment A to this letter.

In accordance with the terms and subject to the conditions of the Offer, you have the right to receive a Replacement Option under the Plan for an equal number of shares of Common Stock, as adjusted for any stock splits, stock dividends and similar events. The terms and conditions of the Replacement Option are described in the Offer to Exchange and include the following:

- The per share exercise price under each Replacement Option will equal the closing sales price of the Common Stock on the NASDAQ Capital Market on the date the Company grants the Replacement Option (the "Grant Date");
- Each Replacement Option will be entirely vested on the Grant Date. Each Replacement Option will vest pro-rata on each monthly anniversary of the Grant Date such that the Replacement Option will become fully vested as of the same date the Current Option would have become fully vested had it not been exchanged; and
- Otherwise, each Replacement Option will have the same term as the Current Option that it is replacing.

In accordance with the terms of the Offer, the Company will grant you Replacement Options on or about [____], 2009. As described in the Offer to Exchange, you will be receiving a new option agreement in connection with your Replacement Options.

If you have any questions about your rights in connection with the grant of a Replacement Option, please contact Threshold's Senior Director, Finance and Controller, Joel A. Fernandes, by telephone at (650) 474-8200 or by email at jfernandes@thresholdpharm.com.

Attachment A

A	B	C	D	E	F
Date of Option Grant	Exercise Price of Option*	Number of Tended Option Shares Subject to Option Grant*	Option Number	Accepted For Exchange	Not Accepted For Exchange
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>

* Adjusted for the 1-for-6 reverse stock split effective August 20, 2008.

FORM OF EMAIL TO ELIGIBLE OPTION HOLDERS

January 12, 2009

Dear Threshold Option Holder:

We are pleased to inform you that earlier today Threshold filed documents with the Securities and Exchange Commission allowing us to reprice certain outstanding options. This repricing will involve a tender offer in which we will exchange outstanding eligible options tendered to us before the end of the tender period for new options with a new exercise price and new vesting schedule. Participation in this tender offer is entirely voluntary.

Information packets and other materials are attached to this email that explain the tender offer, how it works and what you can expect. You should review these materials very carefully because they relate to your rights and obligations under the tender offer.

To participate in the tender offer, you will need to complete a letter of transmittal (contained in a separate attachment to this email), as described in the materials being distributed. Schedule A to the separate letter of transmittal attached to this e-mail contains a list of your stock options that are eligible to be exchanged in the tender offer. The letter of transmittal must be printed and completed per the instructions.

We will provide you with printed copies of any or all of these documents upon your request. Please contact Joel Fernandes at (650) 474-8200 or ojfernandes@thresholdpharm to request copies.

Timing is critical, and if you wait too long you will be ineligible to receive replacement options. After reading these materials, if you still have any questions about the tender offer, you should call Joel Fernandes at (650) 474-8200. We also plan to have an informational meeting on Thursday, January 15 at 1:00 p.m., during which you can ask any questions about the tender offer.

Although we can give no guarantees or assurances, by giving eligible employees, consultants and directors of the Company an opportunity to receive options with an exercise price closer to the Company's recent market price, we hope to provide you with a greater opportunity to benefit from any future successes of the Company.

Sincerely,

The Threshold Management Team