## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

## FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report: October 22, 2008 (Date of earliest event reported)

# THRESHOLD PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-32979 (Commission File Number) 94-3409596 (IRS Employer Identification No.)

1300 Seaport Boulevard Redwood City, California 94063 (Address of principal executive offices) (Zip Code)

(650) 474-8200 (Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

 written communications pursuant to Rule 423 under the Securities Act (17 CFR 250.423)
Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Whitten communications appropriet to Dule 425 and on the Constitute Act (17 CED 220 425)

#### Item 8.01 Other Events

On October 22, 2008, Threshold Pharmaceuticals, Inc. (the "Company") issued a press release announcing that the Company has given two presentations on its clinical stage hypoxia-activated prodrug, TH-302, including preliminary results from twenty-two patients in an ongoing Phase 1 clinical trial evaluating the safety and preliminary efficacy of TH-302 in patients with advanced solid tumors. The first presentation was given at the Boston Biotech R&D Conference held on October 22, 2008 at the Harvard Medical School in Boston, Massachusetts and the second presentation was given at the European Organisation for Research and Treatment of Cancer (EORTC) conference, being held October 21–24, 2008 in Geneva, Switzerland.

A copy of the press release is attached hereto as Exhibit 99.1.

#### Item 9.01 Financial Statements and Exhibits

## (d) Exhibits

99.1 Press Release dated October 22, 2008

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

## THRESHOLD PHARMACEUTICALS, INC.

By: /S/ JOEL A. FERNANDES

Joel A. Fernandes Senior Director, Finance and Controller

Date: October 23, 2008

Contact:
Denise T. Powell
Sr. Director, Corporate Communications
Threshold Pharmaceuticals, Inc.
650-474-8206
dpowell@thresholdpharm.com

## THRESHOLD PHARMACEUTICALS PRESENTS ENCOURAGING ADDITIONAL PRELIMINARY FINDINGS FROM A PHASE 1 CLINICAL TRIAL OF TH-302 FOR SOLID TUMORS

#### Company Presents at Boston Biotech R&D Conference and European Cancer Meeting

REDWOOD CITY, CA – October 22, 2008 – Threshold Pharmaceuticals, Inc. (Nasdaq: THLD) today announced two presentations on its clinical stage hypoxia-activated prodrug, TH-302. The first is the Boston Biotech R&D Conference held today at the Harvard Medical School in Boston. The second is the European Organisation for Research and Treatment of Cancer (EORTC) conference, being held October 21-24, 2008 in Geneva.

Preliminary results from twenty-two patients were presented in an ongoing Phase 1 clinical trial evaluating the safety and preliminary efficacy of TH-302 in patients with advanced solid tumors. The clinical trial was designed with an initial accelerated titration design followed by a standard dose escalation schema. The trial has completed the accelerated titration design component and has enrolled the eighth dosing cohort. The weekly dose has been escalated from the initial dose of 7.5 mg/m2 to 670 mg/m2.

Preliminary efficacy signals have been observed in two patients enrolled in the ongoing Phase 1 trial. As previously reported, one patient with refractory small cell lung cancer metastatic to the liver had a partial response, as judged by RECIST (Response Evaluation Criteria In Solid Tumors), at their initial response assessment. The patient had received two cycles of TH-302 at 480 mg/m2 and discontinued from study after treatment delay unrelated to therapy, and disease progression. More recently, one patient with melanoma metastatic to the lung and liver had a RECIST criteria partial response after two cycles of TH-302 at 670 mg/m2 and is continuing on study. The confirmation of this response will be contingent upon a subsequent assessment and there can be no assurance that that assessment will confirm the initial findings.

The first dose limiting toxicities for TH-302 were reported in the 670 mg/m2 cohort. One patient treated at 670 mg/m2 developed grade 3 Herpes simplex virus perianal and rectal ulcers that were considered related to study drug. A second patient treated at 670 mg/m2 developed grade 3 dehydration due to oral mucositis. Doses below 670 mg/m2 are now being investigated to determine the maximum tolerated dose.

"We continue to learn much from this ongoing trial of TH-302. The safety profile is unusual because TH-302 as monotherapy is not producing significant myelosuppression at doses up to and including 670 mg/m2. These doses appear active based on the two unconfirmed partial responses. The safety and activity profile of TH-302 is encouraging, suggesting the therapeutic index for TH-302 in patients with advanced cancer is favorable. In addition to our TH-302 dose escalation trial we look forward to completing additional trials that are evaluating TH-302 in combination with various chemotherapeutic agents," said John Curd, M.D., Threshold's president and chief medical officer. "We remain focused on developing novel therapies that selectively target tumor hypoxia for patients living with cancer."

The Company has two additional ongoing clinical trials of TH-302. In August 2008, the Company and its clinical investigators commenced a Phase 1/2 clinical trial of TH-302 in combination with various chemotherapeutic agents in patients with advanced solid tumors. Last month, the Company and its clinical investigators commenced a Phase 1/2 clinical trial of TH-302 in combination with doxorubic in in patients with advanced soft tissue sarcoma.

A copy of the poster being presented at EORTC may be obtained by calling the Company.

#### **About Threshold Pharmaceuticals**

Threshold is a biotechnology company focused on the discovery and development of drugs targeting Tumor Hypoxia, the low oxygen condition found in microenvironments of most solid tumors. This approach offers broad potential to treat most solid tumors. By selectively targeting tumor cells, we are building a pipeline of drugs that hold promise to be more effective and less toxic to healthy tissues than conventional anticancer drugs. For additional information, please visit our website (<a href="https://www.thresholdpharm.com">www.thresholdpharm.com</a>).

#### Forward-Looking Statements

Except for statements of historical fact, the statements in this press release are forward-looking statements, including statements regarding Threshold's product candidates, clinical trial results and plans, and potential therapeutic uses and benefits of our product candidates. These statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. Potential risks and uncertainties include, but are not limited to, Threshold's ability to enroll and complete its current and anticipated clinical trials, the time and expense required to conduct such clinical trials and analyze data, the possibility that results from these trials will not be confirmed, potential adverse side effects, issues arising in the regulatory or manufacturing process and the results of such clinical trials (including product safety issues and efficacy results). Further information regarding these and other risks is included under the heading "Risk Factors" in Threshold's Annual Report on Form 10-Q, which was filed with the Securities Exchange Commission on August 7, 2008 and is available from the SEC's website (<a href="https://www.sec.gov">www.sec.gov</a>) and on our website (<a href="https://www.thresholdpharm.com">www.thresholdpharm.com</a>) under the heading "Investors." We do not intend to update any forward-looking statement made in this news release.