

**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: November 18, 2009 (November 18, 2009)
(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, Suite 500
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 425 under the Securities Act (17 CFR 230.425)
- 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))

Item 8.01 Other Events

On November 18, 2009, Threshold Pharmaceuticals, Inc. ("Threshold") issued a press release announcing clinical trial results related to Threshold's clinical stage hypoxia-activated prodrug, TH-302. The results were presented on November 17, 2009 at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics being held November 15 to 19, 2009, in Boston, MA. A copy of Threshold's press release is attached hereto as Exhibit 99.1 and incorporated by reference herein.

Item 9.01 Financial Statements and Exhibits**(d) Exhibits**

99.1 Press Release dated November 18, 2009



PRESS RELEASE

Contact:

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Threshold Pharmaceuticals, Inc.
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**THRESHOLD PHARMACEUTICALS PRESENTS INTERIM PROSTATE CANCER
DATA FROM EARLY STAGE TRIALS OF TH-302**

REDWOOD CITY, CA— November 18, 2009 – Threshold Pharmaceuticals, Inc. (Nasdaq: THLD) today announced clinical trial results related to Threshold's clinical stage hypoxia-activated prodrug, TH-302. The results were presented yesterday at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics being held November 15 to 19, 2009, in Boston, MA.

"Prostate cancer is known to be hypoxic. Several years ago we furthered the support for the rationale of using TH-302 to treat prostate cancer when TH-302 was combined with docetaxel in a preclinical metastatic model of prostate cancer and eradicated all signs of disease," said Charles P. Hart, Ph.D., Threshold's vice president of Biology. "This week we have summarized both the benchmark data and initial clinical data. We are excited to continue investigations with TH-302 and with the potential benefit that it might confer to people living with prostate cancer."

The presentation summarized a series of translational models and select results from two clinical trials of TH-302. Results from these clinical trials were previously discussed at various medical meetings this year. The two clinical trials are both evaluating the safety and preliminary efficacy of TH-302 in patients with advanced solid tumors; one in combination with other chemotherapy agents (the 402 trial) and the other with TH-302 as monotherapy (the 401 trial). In this presentation, results from patients with metastatic castration-resistant prostate cancer (CRPC) were discussed. Results from 14 patients with metastatic CRPC from the two clinical trials were presented in a poster entitled "Bench to Bedside Experience with TH-302: a Tumor-Selective Hypoxia-Activated Prodrug as a Promising Treatment for Prostate Cancer."

Clinical Trial Results

In the 401 trial, 8 patients with metastatic CRPC enrolled in the trial and received TH-302 as monotherapy. All 8 patients had bone metastases and 5 of the 8 patients also had lymph node metastases. TH-302 was administered on days 1, 8 and 15 of a four week cycle. The median dose of TH-302 administered to the 8 patients enrolled in the dose escalation component of the trial was 480 mg/m² (30 to 670 mg/m²). The patients received a median of 3 cycles of TH-302 (range: 1 to 6 cycles). Tumors were assessed using RECIST (Response Evaluation Criteria In Solid Tumors). Six of 7 evaluable patients had stable disease (SD) at their initial tumor assessment after Week 8. In the 401 clinical trial mucosal and skin toxicity were dose-limiting while hematologic toxicity was minimal.

In the 402 trial, docetaxel is one of three chemotherapeutic regimens being evaluated in combination with TH-302 which is given on days 1 and 8 of a three week docetaxel cycle. Docetaxel is administered at the full prescribed dose of 75 mg/m². The maximum tolerated dose (MTD) of TH-302 in combination with docetaxel was established at 340 mg/m². Data from the first 6 patients with metastatic CRPC enrolled in the trial were presented. Patients received a median of more than 5 cycles of TH-302 (range: 1 to 8+ cycles). Three patients continue on the trial and have received a median of 6 cycles of treatment. Four patients had at least one evaluable post-treatment tumor assessment. Three of 4 patients had SD or better including one patient with a confirmed partial response. One of 4 patients discontinued with progressive disease with the onset of bone metastases. Four patients had prostate specific antigen (PSA) assessments after at least 2 cycles of therapy with drop in median PSA of 62 percent. Three of 4 patients had a drop in PSA of at least 50 percent. Skin and mucosal toxicities were not dose limiting. Grade 1 mucosal toxicity was reported in 3 of 6 patients. Skin toxicity of grade 1 or 2 was reported in 4 of 6 patients. Grade 3 neutropenia was reported in 2 patients, one continues on study after a dose reduction and the other continues on study at the full dose of TH-302. Enrollment of patients with metastatic CRPC continues in the 402 trial with the objective of better defining the possible therapeutic benefit of TH-302 combined with docetaxel in this setting.

A copy of the poster may be obtained by calling the Company.

The Company has an additional ongoing clinical trial (the 403 trial) of TH-302. The 403 trial is a Phase 1/2 clinical trial of TH-302 in combination with doxorubicin in patients with advanced soft tissue sarcoma.

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 the website (www.thresholdpharm.com).

Forward-Looking Statements

Except for statements of historical fact, the statements in this press release are forward-looking statements, including statements regarding TH-302, clinical trial results and plans, and potential therapeutic uses and benefits of TH-302. 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 with larger numbers of patients or in subsequent trials, 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 Quarterly Report on Form 10-Q, which was filed with the Securities Exchange Commission on November 5, 2009 and is available from the SEC's website (www.sec.gov) and on our website (www.thresholdpharm.com) under the heading "Investors." Threshold does not intend to update any forward-looking statement made in this news release.

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