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

July 17, 2006
Date of Report
(Date of earliest event reported)

THRESHOLD PHARMACEUTICALS, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**000-51136**	**94-3409596**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. 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)

(Former name or former address, if changed since last report)

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:

☐ 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 July 17, 2006, Threshold Pharmaceuticals, Inc. issued a press release stating that its Phase 2 and Phase 3 trials of TH-070 for BPH (Benign Prostatic Hyperplasia) did not meet their primary endpoints of symptomatic improvement as measured by IPSS (International Prostate Symptom Score), and that based upon the safety and efficacy results, plans to discontinue the development of TH-070. A copy of the press release is furnished as Exhibit 99.1 to this Current Report.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release of Threshold Pharmaceuticals, Inc. dated July 17, 2006 regarding efficacy results of its TH-070 clinical development program for BPH (Benign Prostatic Hyperplasia).

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 hereunto duly authorized.

Threshold Pharmaceuticals, Inc.

Date: July 17, 2006

By: /s/ Janet I. Swearson
Janet I. Swearson
Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release of Threshold Pharmaceuticals, Inc. dated July 17, 2006 regarding efficacy results of its TH-070 clinical development program for BPH (Benign Prostatic Hyperplasia).

Exhibit 99.1

Contact:

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

Carolyn Bumgardner Wang
WeissComm Partners, Inc.
415-946-1065
carolyn@weisscommpartners.com

PHASE 2 AND PHASE 3 CLINICAL TRIALS OF TH-070 IN BENIGN PROSTATIC HYPERPLASIA (BPH) DO NOT MEET PRIMARY ENDPOINT

Conference Call Scheduled for Monday, July 17th at 9:00 a.m. EDT

REDWOOD CITY, CA – July 17, 2006 – Threshold Pharmaceuticals, Inc. (Nasdaq: THLD), today announced that its Phase 2 and Phase 3 trials of TH-070 did not meet their primary endpoints of symptomatic improvement as measured by IPSS (International Prostate Symptom Score). The Phase 2 trial did not generate a statistically significant dose response relationship and the Phase 3 trial did not achieve a statistically significant difference in IPSS between TH-070 and placebo. Based on the safety and efficacy results of these trials, Threshold plans to discontinue development of TH-070 for BPH.

"We are of course disappointed by these results. Although we will continue to analyze the data from these trials, we do not expect that this efficacy data, combined with the liver effects that we reported earlier, will support a path for development of TH-070 for BPH. Therefore we believe it is in the best interest of the company and our shareholders to discontinue the TH-070 BPH program at this time," said Barry Selick, Threshold's chief executive officer. "We will continue to seek additional product candidates with which to broaden our portfolio and look forward to the results from our ongoing Phase 2 and Phase 3 trials of Glufosfamide for the treatment of pancreatic cancer by year-end."

Study Details and Results

The Phase 2 randomized, placebo controlled, double-blind trial (TH-CR-203) enrolled men with moderate to severe BPH. After a two-week placebo run-in period, 216 patients were randomized to receive placebo or one of four doses of TH-070 (5mg, 25mg, 50mg, 150mg) daily for one month and to be followed off therapy for three months. The primary objectives of this study were to determine the dose-response relationship of TH-070 with respect to symptomatic improvement (as measured by IPSS) and to evaluate other efficacy endpoints and the safety at the different doses.

The Phase 3 randomized, placebo controlled, double-blind trial (TH-CR-202) also enrolled men with moderate to severe BPH. After a two-week placebo run-in period, 567 patients were randomized to receive placebo or one of two doses of TH-070 (50mg or 150mg) daily for three months and to be followed off therapy for one additional month. The primary objective was to evaluate the efficacy of TH-070 compared to placebo as measured by IPSS. Dosing in this trial was prematurely discontinued at the same time that the Company announced the partial clinical hold in the U.S. TH-070 program due to adverse events relating to elevated liver enzymes.

The interim analysis of the Phase 2 data did not demonstrate a clear dose response in IPSS at one month of treatment. The mean IPSS change from baseline as measured following placebo run-in to one month of treatment ranged from -2.1 to -2.5 across the five dose groups, including the placebo control.

The interim analysis of the Phase 3 data did not demonstrate a statistically significant difference in IPSS between either of the two drug dose groups (50mg and 150mg) and placebo. The mean IPSS change from baseline as measured following the placebo run-in to one month of treatment ranged from -1.9 to -2.9 and to three months of treatment ranged from -4.4 to -5.5. There was no statistically significant difference in any of the secondary endpoints with the exception of change in prostate specific antigen (PSA) which did show statistical significance at certain time points. Primary endpoint results are summarized below.

The interim safety results from the Phase 2 and Phase 3 trials include seven cases of myalgia and four cases of testicular pain. Across all TH-070 clinical trials, there were 15 patients who had elevations in liver enzymes (as defined by elevations greater than three times the upper limit of normal), two of whom were in the placebo group. Six of the patients with elevated liver enzymes were deemed to have experienced serious adverse events.

Phase 2 U.S. Clinical Trial (interim data)

Endpoint = IPSS (change from baseline)	**Placebo Mean (SD) n=40**	**5mg Mean (SD) n=44**	**25mg Mean (SD) n=43**	**50mg Mean (SD) n=38**	**150mg Mean (SD) n=40**
1 month treatment	-2.1 (4.5)	-2.3 (6.1)	-2.5 (5.2)	-2.2 (4.4)	-2.3 (5.7)

Phase 3 European/Canadian Clinical Trial (interim data)

Endpoint = IPSS (change from baseline)	**Placebo Mean (SD)**	**50mg Mean (SD)**	**150mg Mean (SD)**
1 month treatment	-2.6 (4.8) n=179	-1.9 (4.7) n=186	-2.9 (5.6) n=172
3 month treatment	-5.5 (5.7) n=104	-4.8 (5.5) n=106	-4.4 (5.8) n=108

These developments in the TH-070 program will cause changes to the Company's plans and budgets, and therefore to the financial guidance previously provided by the Company. These changes will be provided in the Company's quarterly earnings press release on August 9, 2006.

Conference Call Details

Threshold will hold a conference call today at 9:00 a.m. EDT to discuss the clinical trial results. To participate in the conference call, please dial 800-497-0451 for domestic callers and 706-758-3306 for international callers, and reference conference passcode 3189614. In addition, this call is being webcast and can be accessed at Threshold's website at www.thresholdpharm.com by clicking on the investor section and following the links from there. A replay of the conference call will be available on Threshold's website through August 17, 2006.

About Threshold Pharmaceuticals

Threshold is a biotechnology company focused on the discovery, development and commercialization of small molecule therapeutics. By selectively targeting abnormally-proliferating tumor cells, the Company's drug candidates are designed to be potentially more effective and less toxic to healthy tissues than conventional treatments. For additional information, please visit our 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 Threshold's product candidates and clinical trial progress, and its financial performance and condition. 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 complete its anticipated clinical trials, the time and expense required to conduct such clinical trials and analyze data, issues arising in the regulatory 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 May 15, 2006 and is available from the SEC's website (www.sec.gov) and on our website (www.thresholdpharm.com) under the heading "Investors." We undertake no duty to update any forward-looking statement made in this news release.