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

March 5, 2009 Date of Report (Date of earliest event reported)

THRESHOLD PHARMACEUTICALS, INC.

(Exact name of Registrant as specified in its charter)

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

1300 Seaport Boulevard, Suite 500 Redwood City, California 94063 (Address of principal executive offices) (Zip code)

 $(650)\ 474\text{-}8200$ (Registrant's telephone number, including area code)

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

Chec	k 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 2.02. Results of Operations and Financial Condition

The information in this Current Report (including Exhibit 99.1) is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. The information in this Current Report (including Exhibit 99.1) shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

On March 5, 2009, Threshold Pharmaceuticals, Inc. issued a press release regarding its financial results for the quarter and year ended December 31, 2008. A copy of the press release is furnished as Exhibit 99.1 to this Current Report. The press release contains statements intended as "forward-looking statements" which are subject to the cautionary statements about forward-looking statements set forth therein.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No. Description

99.1 Press Release of Threshold Pharmaceuticals, Inc. dated March 5, 2009 regarding its financial results for the quarter and year ended December 31, 2008, furnished in accordance with Item 2.02 of this Current Report on Form 8-K.

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: March 5, 2009

By: /s/ Joel A. Fernandes

Joel A. Fernandes

Senior Director, Finance and Controller

EXHIBIT INDEX

Exhibit No.

Description

99.1

Press Release of Threshold Pharmaceuticals, Inc. dated March 5, 2009 regarding its financial results for the quarter and year ended December 31, 2008.

Contact:

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

THRESHOLD PHARMACEUTICALS REPORTS FOURTH QUARTER AND YEAR END 2008 FINANCIAL RESULTS

REDWOOD CITY, CA – March 5, 2009 – Threshold Pharmaceuticals, Inc. (Nasdaq: THLD), today reported financial results for the fourth quarter and the year ended December 31, 2008.

The net loss for 2008 was \$18.3 million compared to a net loss of \$30.7 million in 2007. Total research and development expenses for 2008 decreased to \$13.4 million from \$23.4 million in 2007. The decrease in research and development expenses primarily reflects a decrease in clinical development expenses related to glufosfamide and, to a lesser extent, lower staffing and facilities expenses due to lower headcount. General and administrative expenses were \$6.7 million for 2008 compared to \$10.4 million in 2007. This decrease was primarily due to lower staffing and facilities expenses. Threshold recognized revenue of \$1.4 million for each of the years ending December 31, 2008 and 2007, related to a development agreement with MediBIC Co., Ltd. Non-cash stock compensation expense was \$3.3 million for 2008 compared to \$5.9 million for 2007.

The Company's net loss for the fourth quarter of 2008 was \$4.8 million compared to \$7.4 million for the fourth quarter of 2007. Research and development expenses were \$3.6 million for the fourth quarter of 2008 compared to \$5.1 million for the fourth quarter of 2007. The decrease in research and development expenses primarily reflects a decrease in clinical development expenses related to glufosfamide and, to a lesser extent, lower staffing and facilities expenses due to lower headcount. These decreases in research and development expenses were partially offset by an increase in clinical development expenses for TH-302, the Company's hypoxia-activated prodrug. General and administrative expenses were \$1.7 million for the fourth quarter of 2008 compared to \$2.9 million for the fourth quarter of 2007. This decrease was primarily due to lower staffing expenses and facilities expenses and to a lesser extent lower consulting expenses. The Company recognized revenue of \$0.4 million in each of the fourth quarters of 2008 and 2007, related to a pre-existing development agreement with MediBIC Co., Ltd. Non-cash stock compensation expense was \$0.7 million for the fourth quarter of 2008 compared to \$1.4 million for the fourth quarter of 2007.

As of December 31, 2008, Threshold had \$22.3 million in cash and marketable securities.

Clinical Trial Highlights

The Company is evaluating TH-302, the Company's hypoxia-activated prodrug, as a monotherapy and in combination with four different chemotherapy regimens.

The monotherapy clinical trial has treated over 30 patients with various solid tumors with TH-302 given three weeks out of a four-week cycle. As previously reported, preliminary efficacy signals have been observed in the monotherapy clinical trial including partial responses at the initial assessment in patients with small cell lung cancer and metastatic melanoma. The maximum tolerated dose (MTD) has been established and minimal hematologic toxicity has been observed. This clinical trial has now been expanded to explore potentially higher dosing of TH-302 every three weeks as well as to further investigate single-agent anti-tumor activity in the following tumor types: advanced melanoma, non-small cell lung cancer and small cell lung cancer. With the expansion, the clinical trial will now enroll a total of up to 90 cancer patients. The clinical trial is being conducted at three sites including that of Dr. Glen Weiss, Director of Thoracic Oncology at TCRS at Scottsdale Healthcare who recently said that the new drug appears promising and may be more effective and less toxic to healthy tissues than conventional drugs.

"TH-302 is a new, novel, small molecule that is activated under a metabolic condition characteristic of cancer cells — hypoxia (lack of oxygen). The drug candidate may provide an opportunity to treat slowly dividing tumor cells within hypoxic regions that generally evade traditional chemotherapeutic agents and ultimately contribute to relapse," Dr. Weiss said.

The clinical trials of TH-302 in combination chemotherapy are progressing as planned with dose escalation ongoing to determine the MTD of TH-302 with gemcitabine, docetaxel, pemetrexed and doxorubicin. Once the MTD is determined, the use of TH-302 in the following chemotherapy regimens with specific indications will be investigated: gemcitabine in advanced pancreatic cancer patients, docetaxel in patients with androgen-independent prostate cancer (AIPC) and non-small cell lung cancer (NSCLC), pemetrexed in patients with non-small cell lung cancer and doxorubicin in patients with advanced unresectable soft tissue sarcoma. The Company plans to have interim data available from these clinical trials during the second quarter of 2009.

Dependent on the results of the ongoing clinical trials, the Company is planning a Phase 2 randomized trial in select solid tumors.

2009 Guidance and Key Milestones

The Company currently expects 2009 cash requirements to be in the range of \$19 to \$21 million. The Company expects cash, cash equivalents and marketable securities to last into the first quarter of 2010.

The Company anticipates the following clinical milestones in 2009:

- Present top-line results for TH-302 in monotherapy in 2Q;
- Present interim results for TH-302 in combination therapy in 2Q;
- · Report results from four preclinical abstracts accepted at AACR (American Association for Cancer Research) in April; and,
- Initiate a randomized controlled Phase 2 clinical trial for TH-302.

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 (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 approach to developing new product candidates, clinical trials and anticipated results, potential therapeutic uses and benefits of our product candidates and financial results, estimates, projections and requirements. 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 attract and retain employees, commence, enroll or complete its anticipated clinical trials, the time and expense required to conduct such clinical trials and analyze data, 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 6, 2008 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.

THRESHOLD PHARMACEUTICALS, INC. (A Development Stage Enterprise) CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share amounts) (Unaudited)

		Three Months Ended December 31,		Twelve Months ended December 31,	
	2008	2007	2008	2007	
Revenue	\$ 360	\$ 359	\$ 1,440	\$ 1,436	
Operating expenses					
Research and development	3,567	5,145	13,440	23,375	
General and administrative	1,667	2,894	6,734	10,411	
Total Operating Expenses	5,234	8,039	20,174	33,786	
Loss from operations	(4,874)	(7,680)	(18,734)	(32,350)	
Interest and other income	89	317	503	1,841	
Interest expense	<u>(9)</u>	(45)	(61)	(155)	
Net Loss	<u>\$ (4,794)</u>	\$(7,408)	\$(18,292)	\$(30,664)	
Net loss per common share basic and diluted		\$ (1.19)	\$ (1.97)	\$ (4.97)	
Weighted-average shares used in computing basic and diluted net loss per common share	15,213	6,201	9,275	6,176	

THRESHOLD PHARMACEUTICALS, INC. (A Development Stage Enterprise) CONDENSED CONSOLIDATED BALANCE SHEETS (in thousands)

	December 31, 2008 (unaudited)	December 31, 2007 (1)	
Assets			
Cash, cash equivalents and marketable securities	\$ 22,337	\$ 22,693	
Prepaid expenses and other current assets	518	516	
Property and equipment, net	1,168	2,097	
Other assets	508	508	
Total assets	\$ 24,531	\$ 25,814	
Liabilities and stockholders' equity			
Total current liabilities	\$ 2,563	\$ 5,325	
Long-term liabilities (2)	554	902	
Stockholders' equity	21,414	19,587	
Total liabilities and stockholders' equity	\$ 24,531	\$ 25,814	

- (1) Derived from audited financial statements
- (2) Includes as of December 31, 2007, \$0.3 million of long-term debt under the Company's loan and security agreement