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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2010

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-32979

THRESHOLD PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**94-3409596**
(State or other jurisdiction of incorporation or organization)	**(IRS employer Identification number)**
1300 Seaport Boulevard, Suite 500, Redwood City, CA	**94063**
(Address of principal executive office)	**(Zip Code)**

(650) 474-8200

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) if the Act:

Title of Each Class	**Name of Each Exchange On Which Registered**
Common Stock $0.001 Par Value	**NASDAQ Capital Market**
Series A Participating Preferred Stock	**NASDAQ Capital Market**

Securities registered pursuant to Section 12(g) of the act: None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark whether the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. Yes ☐ No ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, non accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☐	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by non-affiliates of the registrant based upon the closing price of the Common Stock on the NASDAQ Capital Market on June 30, 2010 was $33,072,875.

On March 16, 2011 there were 48,796,113 shares of the registrant's common stock outstanding.

Documents incorporated by reference: Portions of the Proxy Statement for Registrant's Annual Meeting of Stockholders to be held May 26, 2011, or the Proxy Statement, are incorporated herein by reference into Part III.

Threshold Pharmaceuticals, Inc.
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PART I

This annual report on Form 10-K, including the sections entitled "Business," "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). We may, in some cases, use words such as "project," "believe," "anticipate," "plan," "expect," "estimate," "intend," "should," "would," "could," "potentially," "possible", "will," or "may," or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Forward-looking statements may include statements about:

- our ability to commence, and conduct, the timing of the commencement and conduct of, clinical trials for TH-302, and any additional compounds we develop;
- the completion and success of any clinical trials that we commence;
- the timing of results of our clinical trials;
- our receipt and the timing of regulatory approvals, and our satisfaction of ongoing regulatory review;
- our ability to establish and maintain intellectual property rights in our product candidates;
- our ability to timely develop a formulation of TH-302 that will be suitable for commercial production;
- whether any product candidates that we are able to commercialize are safer or more effective than other marketed products, treatments or therapies;
- the ability of our licensee of glufosfamide to develop, manufacture, market and otherwise commercialize glufosfamide, and to raise sufficient funds to commence clinical development;
- our research and development activities, including development of new product candidates, and projected expenditures;
- our ability to complete preclinical and clinical testing successfully for new product candidates that we may develop or license;
- our ability to have manufactured sufficient supplies of active pharmaceutical ingredient, or API, and drug product for clinical testing and commercialization;
- our ability to obtain licenses to any necessary third party intellectual property;
- our ability to retain and hire necessary employees and appropriately staff our development programs;
- our cash needs and ability to raise capital when needed; and
- our financial performance.

There are a number of important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements. These important factors include those that we discuss in this annual report on Form 10-K under the caption "Risk Factors." You should read these factors and the other cautionary statements made in this annual report on Form 10-K as being applicable to all related forward-looking statements wherever they appear in this annual report on Form 10-K. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Unless the context requires otherwise, in this annual report on Form 10-K the terms "Threshold," "Threshold Pharmaceuticals," the "Company," "we," "us" and "our" refer to Threshold Pharmaceuticals, Inc. Threshold Pharmaceuticals, Inc., our logo and Metabolic Targeting are our trademarks. Other trademarks, trade names and service marks used in this annual report on Form 10-K are the property of their respective owners.

ITEM 1. BUSINESS

We are 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 as a consequence of disordered blood vessel growth. This hypoxic environment is known to be resistant to standard chemotherapy and radiation. It is thought to be responsible for the poor prognosis of patients with solid tumors and hematological malignancies (blood cancers) and treating the hypoxic environment is currently believed to be a significant unmet medical need. Our hypoxia activated prodrug ("HAP") product candidates, including TH-302, are designed to specifically target the hypoxic microenvironment of tumors by selective activation of the prodrug to release a potent cytotoxin.

Our focus is on product candidates for the treatment of patients with cancer. Our clinical development efforts are currently focused on TH-302, for which we have exclusive worldwide marketing rights. TH-302, which we discovered, is a novel drug candidate that is activated under severe hypoxic conditions and was designed to specifically target the severe hypoxic regions that are believed to be present in all solid tumors. TH-302 is currently in Phase 1, Phase 1/2 and Phase 2 clinical trials. In June 2010, we reported updated top-line results from the Phase 1 monotherapy trial of TH-302 including updated data in patients with metastatic melanoma and small-cell lung cancer (SCLC). We also reported updated top-line interim results from each of four Phase 1/2 combination therapy investigations of a chemotherapy agent plus TH-302 including updated data in patients with first-line pancreatic cancer treated with gemcitabine plus TH-302 and in patients with soft tissue sarcoma treated with doxorubicin plus TH-302. In October 2010, we reported updated top-line results from our Phase 1/2 combination therapy trial, including updated data in patients with first-line pancreatic cancer treated with gemcitabine plus TH-302. We reported updated top-line results from the Phase 1 monotherapy and Phase 1/2 combination therapy trials in the fourth quarter of 2010, including updated data in patients with soft tissue sarcoma treated with doxorubicin plus TH-302. We also initiated two clinical studies in the second quarter of 2010: a Phase 1 open label clinical trial of TH-302 in patients with advanced leukemias and a randomized, controlled Phase 2 trial of TH-302 in combination with gemcitabine in patients with first-line pancreatic cancer. We reported top-line results from the Phase 1 open label clinical trial in advanced leukemias in the fourth quarter of 2010 and expect to report updated top line results in the second half of 2011. We also expect to report top line efficacy results from the randomized Phase 2 trial at the end of 2011. We have reached agreement with the FDA on the design and planned analysis of a pivotal Phase 3 trial in patients with soft tissue sarcoma. As part of the Special Protocol Assessment (SPA) submission, the FDA has agreed that the design and planned analysis of the proposed Phase 3 trial adequately addresses the objectives necessary to support a regulatory submission. We expect to initiate the pivotal Phase 3 trial in the middle of 2011.

We are working to broaden the applicability of TH-302 to other cancers as well as to discover additional hypoxia activated prodrugs that will selectively target cancer cells.

Our Strategy

Our goal is to create a leading biotechnology company that develops and commercializes drugs based on targeting the tumor microenvironment. We focus on inactive prodrugs of known chemotherapeutic agents that undergo relatively selective activation in the tumor microenvironment and potentially allow for an improved safety and efficacy profile for the drug. Key elements of our strategy are to:

- *Develop TH-302 successfully.* We have an ongoing monotherapy Phase 1 clinical trial that has determined the maximum tolerated dose ("MTD"), dose limiting toxicities (DLTs), safety, pharmacokinetics and preliminary efficacy of TH-302 monotherapy in advanced solid tumors. We expanded enrollment in this trial to investigate TH-302 as a single agent in specific indications in which monotherapy activity has been observed as well as in some indications in which notable activity has been documented in the combination setting. We have two ongoing combination therapy Phase 1/2 clinical trials that have determined the MTD, DLTs, safety, pharmacokinetics and preliminary efficacy

of TH-302 in combination with four currently approved chemotherapies. Data from this collection of clinical trials supported our initial randomized controlled trial of TH-302 in first-line pancreatic cancer. As part of the Special Protocol Assessment (SPA) submission, the FDA has agreed that the design and planned analysis of a proposed Phase 3 trial in patients with soft tissues sarcoma adequately addresses the objectives necessary to support a regulatory submission. We expect to initiate the pivotal Phase 3 trial in the middle of 2011.

- *Continue to broaden our pipeline by discovering and developing new compounds.* We are actively pursuing research programs to discover and develop novel therapies that address major currently unmet medical needs. We will continue to investigate drug candidates from our hypoxia activated prodrug platform for further development. We also may evaluate additional in-licensing opportunities that build on our expertise and complement our current pipeline.
- *Build on our expertise in targeting the tumor microenvironment.* We intend to continue our focused approach in research and clinical development. We believe our expertise in this area gives us an advantage in the identification of new product candidates, therapeutic indications and technologies. We will also leverage the expertise of our scientific and clinical advisors and continue to enter into collaborations with other experts in the field.

Our Product Development Programs

The following table summarizes the status of our current and ongoing product development programs:

Product Candidate	Indication	Development Status	Expected Milestones
TH-302	Hematological malignancies (407)	• Phase 1 monotherapy	• Updated top line results in second half of 2011
	Various solid tumors (401)	• Phase 1 monotherapy	• Final results in 2011
	Solid tumors including advanced pancreatic cancer, castrate-resistant prostate cancer and non-small cell lung cancer (402)	• Phase 1/2 combination therapy	• Final results in 2011
	Soft Tissue Sarcoma (403)	• Phase 1/2 combination therapy	• Updated top line results in first half of 2011
	Advanced pancreatic cancer (404)	• Phase 2 randomized controlled combination therapy	• Top line efficacy results at end of 2011
	Soft Tissue Sarcoma (406)	• Pivotal Phase 3 randomized controlled combination therapy	• Initiate trial in the middle of 2011

Market Opportunities

Current Therapies for Cancer

Many different approaches are used in treating cancer, including surgery, radiation and drugs or a combination of these approaches. Drugs used to treat cancer include chemotherapeutics, hormones and immune-based therapies. Traditionally, strategies for designing cancer therapies have focused on killing cancer cells that exhibit rapid division and growth, and most conventional cancer drugs have been evaluated and optimized using cellular and animal models that reflect rapid cell growth.

However, most solid tumors are actually composed of both rapidly and slowly dividing cells. Conventional cancer treatments are not designed to target the slowly dividing cells found in portions of solid tumors and therefore typically do not succeed in killing all cancerous cells. As a tumor grows, its vasculature is disordered and chaotic, leaving portions of the tumor with regions where the oxygen concentration is significantly lower than in healthy tissues. This condition is called Tumor Hypoxia. Solid tumors have significant hypoxic regions, and because these regions have limited access to the blood supply and oxygen, the cells in them divide slowly, making them resistant to traditional chemotherapy and radiation treatment, which target rapidly dividing cells. Similarly, some chemotherapeutic agents delivered in the blood supply are less able to penetrate into hypoxic regions because they are more distant from the blood supply. Moreover, many scientists now believe that hypoxia can lead to changes in the fundamental properties of tumor cells, including genetic mutations, which can give rise to drug resistance and enhanced metastatic potential. Thus, therapeutics that target hypoxic zones could provide significant additional anti-tumor activity and clinical benefit over current chemotherapeutic and radiation therapies.

Another disadvantage of current cancer therapies that target rapidly dividing cells is their toxic side effects. Because rapidly dividing cells are also found in many healthy tissues, particularly the gastrointestinal tract, bone marrow and hair follicles, nearly all conventional chemotherapy drugs cause severe side effects which may lead to bleeding, infection and anemia, as well as other side effects, such as diarrhea and hair loss. Likewise, radiation generally cannot be administered without causing significant damage to healthy tissue surrounding a tumor. Since our prodrugs are designed to undergo tumor selective activation, we anticipate that they should have a favorable safety profile and produce less toxicity to normal tissues at the doses that are effective in treating tumors than is the case with traditional therapies.

Many of the types of cancers we are targeting with TH-302 are widespread:

Lung Cancer

The American Cancer Society estimates that 222,520 people were diagnosed with lung cancer in the United States in 2010, and approximately 157,300 people died from the disease.

Melanoma

The American Cancer Society estimates that 68,130 people were diagnosed with melanoma in the United States in 2010, and approximately 8,700 people died from the disease.

Pancreatic Cancer

The American Cancer Society estimates that 43,140 patients were diagnosed with pancreatic cancer in the United States in 2010, and approximately 36,800 patients died from the disease.

Prostate Cancer

The American Cancer Society estimates that 217,730 people were diagnosed with prostate cancer in the United States in 2010, and approximately 32,050 people died from the disease.

Soft Tissue Sarcoma

The American Cancer Society estimates that 10,520 people were diagnosed with soft tissue sarcoma in the United States in 2010, and approximately 3,920 people died from the disease.

Advance Leukemias

According to the American Cancer Society, leukemia accounts for 3% of all cancers diagnosed in the United States in 2010, and about 22,000 people died in 2010 of some form of leukemia. Chronic lymphocytic leukemia is the most common leukemia in the United States, accounting for a third of cases diagnosed each year. Acute myelogenous leukemia accounts for 28% of diagnosed adult leukemias.

TH-302

Our lead product candidate for cancer is TH-302, a novel prodrug candidate we discovered. In *in vitro* studies it is preferentially activated under severe hypoxic conditions and has demonstrated potent anticancer activity in multiple preclinical cancer models. TH-302 combines a 2-nitroimidazole oxygen-sensing trigger with a masked deoxyribonucleic acid ("DNA") crosslinker. Upon activation in oxygen deficient zones, TH-302 is converted selectively to the drug's active form, dibromo isophosphoramide mustard, a potent alkylator. TH-302 targets levels of severe hypoxia that are found in tumors but are rare in normal tissues—this is how selective targeting of the tumor occurs. After conversion to the active form of the drug, the hypoxic cells are exposed to high concentrations of released cytotoxic agent, which can also diffuse into the adjacent regions of the tumor. We believe that TH-302 will be less likely to produce the systemic hematologic toxicity caused by most cytotoxic chemotherapies, while targeting the hypoxic regions of tumors known to be more difficult to treat with standard therapies.

Preclinical studies of TH-302

In addition to all of the standard toxicity and pharmacokinetic studies that are required to enable an investigational new drug (IND) application, numerous*in vitro* and *in vivo* efficacy studies with TH-302 have been conducted. A summary of the pre-clinical efficacy studies with TH-302 follows. Over 45 different human tumor-derived cell lines, representing 18 different tumor types, have been evaluated for their sensitivity to TH-302 and all were shown to have enhanced sensitivity to TH-302 under hypoxic conditions compared to higher oxygen concentrations. No cell lines that were investigated were resistant to TH-302 under hypoxic conditions. In addition, we have also evaluated TH-302 in ectopic xenograft models of cancer, in which human tumor cells are implanted beneath the skin of mice and permitted to grow as tumors. More than 20 of these studies were conducted using five different tumor types and multiple drug combinations. In these models, the combination of TH-302 with either chemotherapeutic agents or radiation consistently added efficacy above that seen with the single agent chemotherapeutic. We conducted animal studies of TH-302 in orthotopic mouse models of human cancer, in which human cancer cells are implanted into the corresponding mouse tissue and tumors are allowed to develop before treatment, to assess the efficacy of TH-302 in treating a variety of cancer types. In these models, TH-302 demonstrated promising efficacy when used in combination with standard chemotherapeutic agents. In an orthotopic mouse model of human pancreatic cancer, in which mice were treated with either gemcitabine or gemcitabine in combination with TH-302, complete responses were observed in one out of eight animals treated with TH-302 in combination with gemcitabine. In comparison, no complete responses were seen following single-agent gemcitabine therapy. In a similar mouse model of human prostate cancer, complete responses were observed in four out of eight animals treated with TH-302 in combination with taxol therapy. In comparison, no complete responses were reported with single-agent taxol. TH-302 was also tested in combination with docetaxel therapy in a metastatic mouse model of human hormone refractory prostate cancer. The combination of TH-302 with docetaxel resulted in eight out of ten complete responses. In comparison, three out of eight complete responses were reported with single-agent docetaxel. TH-302 has been evaluated in a metastatic mouse model of human lung cancer, alone and in combination with docetaxel. These preclinical results, which reflect our overall experience with cell-based animal models, indicate that combination therapies with TH-302 may be efficacious in the treatment of human solid tumors. There can be no assurance, however, that these animal studies will accurately predict the results of human clinical trials.

More recently, preclinical studies of TH-302 efficacy in hematological malignancies (also known as blood cancers, for example, leukemias, multiple myeloma, and lymphomas) were initiated. The role of hypoxia in the pathogenesis of hematological malignancies and its role in disease progression is an emerging area of active research in the cancer biology community. We have conducted preclinical studies with TH-302 in both cell- and animal models of multiple myeloma. Our *in vitro* results show that TH-302 alone and the combination of TH-302 plus Bortezomib synergistically induced apoptosis (programmed cell death). In addition, the combination of TH-302 plus Bortezomib conducted in a mouse model of multiple myeloma showed statistically significant improvements in multiple disease parameters, including circulating paraprotein levels, the standard endpoint for assessing efficacy of drug in multiple myeloma. Through an academic collaboration we have also demonstrated

preclinical efficacy of TH-302 in a mouse model of acute leukemia. TH-302 treatment resulted in marked *in vitro* hypoxic-specific cell death of human leukemia cells under the same conditions where traditional chemotherapeutic agents such as cytarabine and doxorubicin were not effective. *In vivo*, TH-302 treatment significantly inhibited leukemia disease progression in a mouse model in which immunocompromised mice were injected with a human leukemia cell line. These preclinical studies in hematological malignancy models provide the basis for human clinical evaluation of TH-302 in patients with multiple myeloma and leukemia. There can be no assurance, however, that these animal studies will accurately predict the results of human clinical trials.

TH-302 Monotherapy Clinical Trial

In July 2007, we commenced a first-in-human Phase 1 clinical trial of TH-302 monotherapy, as a 30 to 60-minute intravenous infusion. This trial, also known as the 401 trial enrolled 129 patients, with enrollment completed in the second quarter of 2010. The trial was initiated as a dose-escalation clinical trial to determine the MTD, dose limiting toxicity, safety, pharmacokinetics and preliminary efficacy of weekly dosing of TH-302.

In January 2009 the Phase 1 clinical trial was expanded to a Phase 1/2 clinical trial to investigate the activity of TH-302 at the MTD in patients with advanced/metastatic melanoma, SCLC or non-small cell lung cancer (NSCLC). At the same time the trial was expanded to establish the MTD utilizing a once every three week dosing regimen.

In December 2009 the clinical trial enrollment was further expanded to investigate the activity of TH-302 at a dose level of 480 mg/m^2 in patients with advanced/metastatic melanoma, SCLC and a set of histologies and tumor indications in which activity was reported in the combination trial.

During 2010, we reported updated top-line efficacy results from all patients in the trial including data on specific indications. Partial responses ("PRs") were documented in eight of thirty-six patients (22%) with metastatic melanoma and two of ten patients (20%) with refractory SCLC and two of eight patients (25%) with squamous cell carcinoma of the head or neck. The PRs were the best responses as assessed by Response Evaluation Criteria in Solid Tumors (RECIST). There can be no assurance that our initial results will be replicated with the treatment of additional patients.

In June 2010, we initiated a Phase 1 open label clinical trial of TH-302 in patients with advanced leukemias. The objectives of the Phase 1 trial are to determine the MTD, DLT, safety, tolerability, clinical activity and pharmacokinetics of TH-302 in patients with advanced leukemia. Eleven patients with either acute myelogenous leukemia (AML) or acute lymphoblastic leukemia (ALL) have been enrolled in the trial. The starting dose in the trial was 120mg/m^2 daily for 5 days of a 21-day cycle. The second dose cohort was treated with TH-302 at a dose of 170mg/m^2 and the third dose cohort has completed enrollment at 240mg/m^2. The dose of TH-302 will continue to be escalated until the MTD is established. To date no DLTs have been reported in any of the dose cohorts. Preliminary efficacy assessments have indicated clinical activity in a subset of subjects with relapsed/refractory AML and ALL as evidenced by stabilization or reduction of bone marrow and/or peripheral blast counts. We reported early top-line results from the Phase 1 open label clinical trial in advanced leukemias in the fourth quarter of 2010 and expect to report updated top-line results in the second half of 2011.

TH-302 Combination Therapy Clinical Trials

In August 2008, we initiated a multi-armed Phase 1/2 clinical trial of TH-302 which includes three separate treatment arms, with each arm combining TH-302 with a different chemotherapeutic agent for the treatment of patients with solid tumors. This trial, also known as the 402 trial, enrolled 160 patients including 71 patients treated with TH-302 plus gemcitabine, 51 patients treated with TH-302 plus docetaxel and 38 patients treated with TH-302 plus pemetrexed. Each of the combination treatments had a dose escalation phase to establish the MTD and a dose expansion phase at the recommended Phase 2 doses of TH-302 within four specific indications with approximately 12-40 patients treated in each indication. 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. This trial, also known as the 403 trial, will include up to 91 patients (16 in the dose escalation arm). These combination trials may allow further development in hormone refractory prostatic carcinoma, metastatic pancreatic cancer, NSCLC and soft tissue sarcoma. These indications have been highlighted in view of the high degree of efficacy of TH-302 in combination with chemotherapy in relevant pre-clinical models combined with the significant unmet medical needs represented by each of these tumor types.

In October 2010, results from the 402 clinical trial were presented at the 35th Congress of the European Society for Medical Oncology (ESMO). In the 402 trial, one hundred and forty-two patients had been assessed for response in the trial's three separate treatment arms. In the TH-302 plus gemcitabine arm, sixty-four patients had tumor assessments, fourteen (22%) of whom had a PR or CR in the following cancers: pancreatic (8), ovarian, esophageal, squamous NSCLC, neuroendocrine and thyroid. There were forty patients (62%) with SD. In January 2011, results from the patients with pancreatic cancer treated with TH-302 plus gemcitabine were presented at The American Society of Clinical Oncology Gastrointestinal Cancer Symposium. Of the forty-seven patients with first-line pancreatic cancer forty-three were assessed for response one achieved a CR, eight achieved PRs and thirty have had SD. The majority of these patients received TH-302 dose of 240 mg/m2 or 340 mg/m2. Among the patients receiving 340 mg/m2 of TH-302, there was one patient with a complete response, 6 patients with a partial response, 13 patients with stable disease and one patient with progressive disease. Among the patients receiving 240 mg/m2 of TH-302, there were 13 patients with stable disease and 3 patients with progressive disease. Median overall survival (OS), based upon data for all 47 patients regardless of TH-302 dose, was 8.5 months (95% CI: 6.9 to 13.4 months) and median progression-free survival (PFS) was 5.9 months (95% CI: 4.8 months to not reached). As presented at ESMO, in the TH-302 plus docetaxel arm, forty-four had tumor assessments, six patients (14%) of whom had a PR in the following cancers: prostate (3), NSCLC (2) and anal. There were twenty-seven patients (61%) with SD. In the TH-302 plus pemetrexed arm, thirty-four patients have had tumor assessments, eleven patients (32%) of whom had a PR in the following cancers: NSCLC (6), transitional cell carcinoma (2), pancreatic, anal and hepatocellular. There were twelve patients (35%) with SD. Of the thirty-two patients with relapsed or refractory NSCLC treated with TH-302 in combination with either docetaxel or pemetrexed, eight patients achieved PRs and fourteen patients achieved SD. The median PFS in this group was 4.2 months (95% CI: 2.8 months to Not Reached). In the TH-302 plus docetaxel treatment arm, 15 patients with castration resistant prostate cancer were treated. Of the 13 patients with at least one evaluable post-treatment tumor assessment, 3 patients (23%) had a partial response, 9 patients (69%) achieved stable disease and one patient (8%) had progressive disease. Eleven of the 15 (73%) patients had a PSA reduction of greater than 50%. Hematologic toxicity after administering TH-302 in combination with chemotherapy was higher than might be expected if chemotherapy was administered by itself, and the myelosuppression, as manifested by reduced platelet count or reduced neutrophil count, was the primary dose limiting toxicity. Skin and mucosal toxicities were TH-302 dose dependent with a trend for increased frequency and greater severity at higher doses. Although these skin and mucosal toxicities have been bothersome in some patients and resulted in dose reductions or delays in therapy, these events have been reversible with an improvement in symptoms between cycles and following dose reductions. At the current dose levels the hematologic, skin and mucosal toxicities have been acceptable. Investigations are ongoing to better understand and treat, or prevent, these toxicities. The addition of TH-302 to standard chemotherapies does not appear to enhance the toxicity in other body systems.

In November 2010, results from the 403 clinical trial were presented at the 16th Annual Connective Tissue Oncology Society (CTOS) Meeting for the first fifty-seven patients in the trial. Fifty-four patients had at least one evaluable post-treatment tumor assessment, including eighteen (33%) with a PR. Twelve of the PRs are confirmed, four were pending confirmation at the next response assessment and two were unconfirmed. Fifteen of the 57 patients continue to receive TH-302 after receiving TH-302 for 3 to 12 three-week cycles. Twenty-one patients went on to receive single agent TH-302 after completing 6 cycles of the combination regimen. Twenty-eight (52%) patients achieved SD while eight (15%) had PD. Median PFS was 6.4 months (95% CI: 5.6 months to 6.9 months). The six-month progression-free rate was 56%. In the trial after observing significant, but not dose limiting toxicity at a TH-302 dose of 240 mg/m^2, prophylactic growth factor support was initiated. Two dose limiting toxicities, grade 3 cellulitis with grade 4 neutropenia and grade 4 thrombocytopenia were observed in

two of four patients treated at a TH-302 dose of 340 mg/m^2. The MTD was then established at 300 mg/m^2. Forty-seven of the fifty-seven patients received the MTD of 300 mg/m^2. At the MTD the frequency of grade 3/4 neutropenia was 24% and of grade 3/4 thrombocytopenia was 26%. The most common adverse events were fatigue (65%), nausea (65%), alopecia (47%) and stomatitis (37%). Seventeen patients developed a rash. The combined regimen was well tolerated with no additive toxicity to doxorubicin and no other cumulative toxicities. Skin and mucosal toxicities were reversible and have not been dose limiting at the maximum tolerated dose.

As part of the Special Protocol Assessment (SPA) submission, the FDA has agreed that the design and planned analysis of a proposed Phase 3 trial in patients with soft tissue sarcoma adequately addresses the objectives necessary to support a regulatory submission. The Phase 3 trial will be a 450 patient, randomized, open-label, multi-center trial comparing two treatment regimens for patients with metastatic and/or advanced unresectable soft tissue sarcoma who have not received prior doxorubicin. This trial is designed to demonstrate the clinical benefit of TH-302 in combination with doxorubicin compared to doxorubicin alone based on a primary efficacy endpoint of overall survival. The trial includes an interim analysis based on progression-free survival expected to occur about half-way into enrollment and an interim analysis based on overall survival expected to occur at the end of enrollment. Patients will be randomized to receive TH-302 (300 mg/m^2 on days 1 and 8 of a 21 day cycle) in addition to the standard dosing schedule of doxorubicin (75 mg/m^2 on day 1 of the 21 day cycle) compared to doxorubicin alone. The Company plans to initiate the pivotal Phase 3 trial in the middle of 2011.

We also initiated a randomized, controlled Phase 2 trial of TH-302 in combination with gemcitabine in patients with first-line pancreatic cancer. Approximately 165 patients with previously untreated, locally advanced, unresectable or metastatic pancreatic adenocarcinoma are planned to enroll in the clinical trial at various sites in the United States. The primary endpoint of the trial is progression free survival. The secondary endpoints are overall response rate, overall survival, event-free survival, CA 19-9 response rate as well as various safety parameters. Tumor response will be evaluated at baseline and every eight weeks using the RECIST 1.1 criteria. Patients will be randomized equally into one of three cohorts: TH-302 at a dose of 240 mg/m2 plus gemcitabine or TH-302 at a dose of 340 mg/m2 plus gemcitabine or gemcitabine alone. Patients who successfully complete treatment of six cycles without evidence of significant treatment-related toxicity or progressive disease may continue to receive treatment. If a patient's cancer progresses while on gemcitabine alone, the patient may crossover into one of the TH-302 plus gemcitabine cohorts. A final top line analysis will be performed at a minimum of 122 events, which is expected to occur at the end of 2011. There can be no assurance that the uncontrolled results from our open-label trials will be confirmed in this controlled trial.

Glufosfamide

From 2004 through 2009 we conducted clinical development of glufosfamide, a drug candidate that shares certain structural characteristics with glucose but acts instead as a chemotherapeutic agent when taken up by a cell. In October 2009, we entered into an exclusive license agreement with Eleison Pharmaceuticals, Inc. ("Eleison"). Pursuant to the agreement we granted Eleison exclusive worldwide rights to develop and commercialize glufosfamide for the treatment of cancer in humans and animals, and certain other uses. Under the agreement, Eleison is responsible for the development, manufacturing and marketing of glufosfamide. Eleison and Threshold will share equally in the profits of commercialization, if the further clinical development of glufosfamide leads to regulatory approval and marketing. No further development by Threshold Pharmaceuticals is planned.

Discovery Research

We have research programs focused on better understanding the mechanism and maximizing the effectiveness of TH-302 in the treatment of cancer as well as identifying new therapeutic candidates that target the microenvironments of solid tumors and hematological malignancies, particularly the severely hypoxic compartments. These extremely low oxygen conditions are not found in most normal tissues. The hypoxic zones

of tumors are known to be resistant to standard chemotherapeutics and to radiation therapy. Hypoxia is also believed to contribute to more aggressive, invasive, and metastatic cancer phenotypes. Tumor hypoxia correlates with poor prognosis in cancer patients and is believed to represent a significant unmet medical need. The general nature of hypoxia in cancers offers the possibility for cancer therapeutics which are broadly useful in many indications with an associated large market opportunity. It is also now known that certain anticancer therapies (e.g. antiangiogenic agents) lead to an increase in tumor hypoxia, and may support the combination of those therapies with hypoxia-targeted agents.

Our most advanced efforts targeting these regions are the design and development of novel hypoxia activated cytotoxic prodrug compounds. A prodrug is an inactive compound that is converted in the human body by enzymatic processes that result in the formation of an active drug. The prodrug concept is well established in chemotherapy and, was initially only employed to modify the pharmacokinetic properties of compounds through non-specific activation processes. More recently has the concept been applied to the design of agents that are selectively activated in tumor tissues through specific activation processes.

Our prodrug candidates typically have two distinct parts, a toxic portion (the chemotherapeutic toxin) and an attached trigger molecule. To prevent general toxicity, the trigger molecule masks the toxin until the prodrug is activated by the low oxygen concentration in the hypoxic zones of solid tumors and hematological malignancies. Once activated, the toxin kills cells in its vicinity. We have designed prodrug candidates that are triggered only at the very low oxygen levels found in these hypoxic regions. Our experiments indicate that we can achieve a greater than 100-fold difference in cytotoxicity between cells in normal oxygen levels and hypoxic cells. Our lead investigational drug candidate, TH-302, was our first product candidate from this program. TH-302 is highly selective and produces a DNA cross-linking toxin upon activation. Hypoxia activated prodrugs of other toxin classes are being pursued. Lead compounds have demonstrated promising *in vitro* activity, and additional characterization, evaluation and optimization of these compounds is currently underway.

Our expertise includes broad capabilities in chemical synthesis, biological assay development and*in vitro* and *in vivo* compound evaluation and pharmacology. Our medicinal chemistry expertise allows us to turn initially promising compounds generated by our chemists into drug candidates. We believe that our research focus combined with our integrated drug discovery platform provides us with the capacity to optimize our chances of successfully translating our laboratory observations with TH-302 to the clinic as well as to identify, discover and develop novel therapies for the treatment of cancer.

Manufacturing and Supply

The production of TH-302 employs small molecule organic chemistry procedures that are standard for the pharmaceutical industry. We currently rely on contract manufacturers for the manufacture of active pharmaceutical ingredient (“API”), and final drug product of TH-302. We intend to continue to use our financial resources to accelerate the development of our product candidates rather than diverting resources to establish our own manufacturing facilities.

We are currently using contract manufacturers to manufacture TH-302 API and TH-302 drug product. We have scheduled manufacturing to meet our clinical supply needs for 2011. We based our estimates for the amount of drug we will need on assumptions about trial enrollment and trial dose levels. If we are not successful in manufacturing sufficient quantities of TH-302 API and drug product or consume more drug product than anticipated because of a higher than expected trial utilization or have quality issues that limit the utilization of the drug product, we may experience a significant delay in our TH-302 clinical program.

We will need to enter into additional agreements for more supplies of each of our product candidates to complete clinical development and/or commercialize them. These products will need to satisfy all cGMP manufacturing requirements, including passing product specifications. Our inability to satisfy these requirements could delay our clinical programs.

During the years ended December 31, 2010, 2009 and 2008, we spent $18.9 million, $15.8 million and $13.4 million, respectively, on research and development, including product development, discovery research and contract manufacturing activities.

License and Development Agreements

On October 14, 2009, we entered into an exclusive license agreement with Eleison Pharmaceuticals, Inc. ("Eleison"). Pursuant to the agreement we granted Eleison exclusive worldwide rights to develop and commercialize glufosfamide for the treatment of cancer in humans and animals, and certain other uses. Under the agreement, Eleison is responsible for the development, manufacturing and marketing of glufosfamide. Eleison and Threshold will share equally in the profits of commercialization, if the further clinical development of glufosfamide leads to regulatory approval and marketing.

Eleison will pay us 50% of its profits from commercialization on a quarterly basis, beginning on the date of first commercial sale, if any. Eleison has the right to sublicense some or all of its rights under the agreement, and will pay us 50% of amounts received under any sublicenses, including, without limitation, any royalty payments, license fee payments, milestone payments and payments for any equity or debt purchases by a sublicensee, within 30 days of the receipt of any such amounts or payments by Eleison. Eleison will bear all costs associated with development, commercialization and patent prosecution, and will control product development and commercialization. In addition, Eleison will be responsible for all royalty and milestone payments due under the Baxter license and MediBIC development agreement. The agreement contemplates that Eleison, to satisfy its diligence obligations, will raise sufficient funds to commence clinical development activities with glufosfamide.

In the event that Eleison fails to satisfy its diligence obligations, we may, at our option, terminate the agreement for material breach or convert the license granted under the agreement to a non-exclusive license.

The agreement will remain in effect as long as Eleison continues to sell glufosfamide anywhere in the world or receives payments under any sublicenses. Each party is entitled to terminate the agreement upon the other party's material breach after expiration of a 60-day cure period (30 days in the event of a payment breach). Each party is entitled to terminate the agreement immediately upon the bankruptcy or similar petition of the other party that is not discharged within 60 days, or the assignment for the benefit of creditors by, or the appointment of a receiver over the property of, the other party. In addition, Eleison may terminate the agreement for convenience at any time on 90 days written notice to us.

Following any termination by Eleison for convenience or by us for Eleison's material breach, all licensed rights will revert to us. Following any termination by Eleison for our material breach, all licensed rights will fully vest in Eleison, provided that Eleison will be required to pay us 50% of the profit sharing payments it otherwise would have been required to pay us under the agreement.

Patents and Proprietary Rights

Our policy is to patent the technologies, inventions and improvements that we consider important to the development of our business. As of December 31, 2010, we owned or held exclusive license to United States, Patent Cooperation Treaty ("PCT") applications, and foreign patents and patent applications relating to our research and development programs.

Our TH-302 product candidate and its use in the treatment of cancer are claimed in US and corresponding foreign patent applications in major market countries and are owned by us. We are seeking compound *per se* patent protection for TH-302 as well as claims directed to its use, alone and in combination with other cancer drugs, in the treatment of cancer. We also own other United States, PCT, and foreign national patent applications relating to the results of our research on hypoxia-activated prodrugs and their use as cancer drugs and related reagents and methods.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our ability to maintain and solidify our proprietary position for our technology will depend on our success in obtaining effective claims and enforcing those claims once granted. We do not know whether any of our pending patent applications will result in the issuance of any patents. Moreover, an issued patent does not guarantee us the right to practice the patented technology or commercialize the patented product. Other parties may have blocking patents that could be used to prevent us from commercializing our patented products and practicing our patented technology. Our issued patents and those that may be issued in the future may be challenged, invalidated, or circumvented, which could limit our ability or render us unable to stop competitors from marketing related products as well as shorten the term of patent protection that we may have for our products. In addition, the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies that do not infringe our intellectual property rights. For these reasons, we may have competition for our products. Moreover, because of the extensive time required for development, testing and regulatory review of a potential therapeutic product, it is possible that, before any of our products can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent.

We also rely on trade secrets, technical know-how and continuing innovation to develop and maintain our competitive position. We seek to protect our proprietary information by requiring our employees and certain of our consultants, contractors, outside scientific collaborators and other advisors to execute non-disclosure and assignment of invention agreements on commencement of their employment or engagement. Agreements with our employees also forbid them from using third party trade secret or other confidential information in their work. We also require confidentiality or material transfer agreements from third parties that receive our confidential data or proprietary materials.

The biotechnology and biopharmaceutical industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. For so long as our product candidates are in clinical trials, we believe our clinical activities fall within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States, which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA. This exemption does not apply to commercialization activities, however; if our product candidates are commercialized, then the possibility of a patent infringement claim against us increases. While we attempt to ensure that our clinical product candidates and the methods we employ to manufacture them, as well as the methods for their use we intend to promote, do not infringe other parties' patents and other proprietary rights, there can be no assurance that they do not, and competitors or other parties may assert that we infringe their proprietary rights in any event.

Competition

We operate in the highly competitive segment of the pharmaceutical market comprised of pharmaceutical and biotechnology companies that research, develop and commercialize products designed to treat cancer. Many of our competitors have significantly greater financial, manufacturing, marketing and product development resources than we do. Large pharmaceutical companies in particular have extensive experience in clinical testing and in obtaining regulatory approval for drugs. These companies also have significantly greater research capabilities than we do. In addition, many universities and private and public research institutes are active in cancer research, some in direct competition with us. We also compete with these organizations to recruit scientists and clinical development personnel.

Each cancer indication for which we are developing products has a number of established medical therapies with which our candidates will compete. Most major pharmaceutical companies and many biotechnology companies are aggressively pursuing cancer development programs, including traditional therapies and therapies with novel mechanisms of action. Our TH-302 product candidate for targeting the tumor hypoxia may eventually compete with other companies who are developing or were developing drugs that target tumor hypoxia such as

Proacta Incorporated. A number of biotechnology and pharmaceutical companies are marketing and/or developing cancer therapeutics competing in prostate, lung, pancreatic, melanoma and soft tissue sarcoma. Such companies include: AstraZeneca PLC, Genentech, Inc., Bristol-Myers Squibb Company, Eli Lilly and Company, GlaxoSmithKline plc, Bayer Pharmaceuticals, Hoffmann-LaRoche, Inc., Infinity Pharmaceuticals, Johnson & Johnson, Onyx Pharmaceuticals, Inc., Merck KGaA, Novartis AG, Pfizer, Inc., Amgen Inc., Clovis Oncology, ImClone Systems, Inc., Millennium Pharmaceuticals, Inc., OSI Pharmaceuticals, Inc., Telik, Inc., Sanofi-Aventis U.S., Sunesis Pharmaceuticals, Inc., Plexxikon Inc., Celgene Corporation, Abraxis Bioscience Inc., ARIAD Pharmaceuticals, Inc. and ZIOPHARM Oncology, Inc.

Governmental Regulation and Product Approval

The manufacturing and marketing of our potential products and our ongoing research and development activities are subject to extensive regulation by the FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries.

United States Regulation

Before any of our products can be marketed in the United States, they must secure approval by the FDA. To secure this approval, any drug we develop must undergo rigorous preclinical testing and clinical trials that demonstrate the product candidate's safety and effectiveness for each chosen indication for use. This extensive regulatory process controls, among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale, and distribution of biopharmaceutical products.

In general, the process required by the FDA before investigational drugs may be marketed in the United States involves the following steps:

- pre-clinical laboratory and animal tests;
- submission of an IND, which must become effective before human clinical trials may begin;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug for its intended use;
- pre-approval inspection of manufacturing facilities and selected clinical investigators; and
- FDA approval of an NDA, or of an NDA supplement (for subsequent indications).

Preclinical Testing

In the United States, drug candidates are tested in animals until adequate proof of safety is established. These preclinical studies generally evaluate the mechanism of action of the product and assess the potential safety and efficacy of the product. Tested compounds must be produced according to applicable current good manufacturing practice, or cGMP, requirements and preclinical safety tests must be conducted in compliance with FDA and international regulations regarding good laboratory practices, or GLP. The results of the preclinical tests, together with manufacturing information and analytical data, are generally submitted to the FDA as part of an IND, which must become effective before human clinical trials may commence. The IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA requests an extension or raises concerns about the conduct of the clinical trials as outlined in the application. If the FDA has any concerns, the sponsor of the application and the FDA must resolve the concerns before clinical trials can begin. Submission of an IND may not result in FDA authorization to commence a clinical trial. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development, and the FDA must grant permission for each clinical trial to start and continue. Regulatory authorities may require additional data before allowing the clinical trials to commence or proceed from one Phase to another, and could demand that the trials be discontinued or suspended at any time if there are significant

safety issues. Furthermore, an independent institutional review board, or IRB, for each medical center proposing to participate in the conduct of the clinical trial must review and approve the clinical protocol and patient informed consent before the center commences the clinical trial.

Clinical Trials

Clinical trials for new drug candidates are typically conducted in three sequential phases that may overlap. In Phase 1 involves the initial introduction of the drug candidate into humans and are conducted in volunteers or in patients with a specific disease depending on the intended use. The emphasis in Phase 1 is on testing for safety or adverse effects, dosage, tolerance, metabolism, distribution, excretion, and clinical pharmacology. Phase 2 involves clinical trials in a limited patient population to determine the initial efficacy of the drug candidate for specific targeted indications, to determine dosage tolerance and optimal dosage and to identify possible adverse side effects and safety risks. Once a compound shows evidence of effectiveness and is found to have an acceptable safety profile in Phase 2 clinical trials, pivotal controlled Phase 3 clinical trials are undertaken to more fully evaluate clinical outcomes and to establish the overall risk/benefit profile of the drug, and to provide, if appropriate, an adequate basis for product labeling. During all clinical trials, physicians monitor patients to determine effectiveness of the drug candidate and observe and report any reactions or safety risks that may result from use of the drug candidate. The FDA, the IRB, or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk.

The data from the clinical trials, together with preclinical data and other supporting information that establishes a drug candidate's safety, are submitted to the FDA in the form of an NDA or NDA supplement (for approval of a new indication if the product candidate is already approved for another indication). Under applicable laws and FDA regulations, each NDA submitted for FDA approval is usually given an internal administrative review within 45 to 60 days following submission of the NDA. If deemed complete, the FDA will "file" the NDA, thereby triggering substantive review of the application. The FDA can refuse to file any NDA that it deems incomplete or not properly reviewable. The FDA has established internal substantive review goals of six months for priority NDAs (for drugs addressing serious or life threatening conditions for which there is an unmet medical need) and ten months for regular NDAs. The FDA, however, is not legally required to complete its review within these periods, and these performance goals may change over time. Moreover, the outcome of the review, even if generally favorable, is not typically an actual approval, but an "action letter" that describes additional work that must be done before the NDA can be approved. The FDA's review of an NDA may involve review and recommendations by an independent FDA advisory committee. The FDA may deny approval of an NDA or NDA supplement if the applicable regulatory criteria are not satisfied, or it may require additional clinical data and/or an additional pivotal Phase 3 clinical trial. Even if such data are submitted, the FDA may ultimately decide that the NDA or NDA supplement does not satisfy the criteria for approval.

Data Review and Approval

Satisfaction of FDA requirements or similar requirements of state, local and foreign regulatory agencies typically takes several years and requires the expenditure of substantial financial resources. Information generated in this process is susceptible to varying interpretations that could delay, limit, or prevent regulatory approval at any stage of the process. Accordingly, the actual time and expense required to bring a product to market may vary substantially. We cannot be certain that we will submit applications for required authorizations to manufacture and/or market potential products or that any such application will be reviewed and approved by the appropriate regulatory authorities in a timely manner, if at all. Data obtained from clinical activities is not always conclusive and may be susceptible to varying interpretations, which could delay, limit, or prevent regulatory approval. Success in early stage clinical trials does not ensure success in later stage clinical trials. Even if a product candidate receives regulatory approval, the approval may be significantly limited to specific disease states, patient populations, and dosages, or have conditions placed on them that restrict the commercial applications, advertising, promotion, or distribution of these products.

Once issued, the FDA may withdraw product approval if ongoing regulatory standards are not met or if safety problems occur after the product reaches the market. In addition, the FDA may require testing and surveillance programs to monitor the effect of approved products which have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs. The FDA may also request additional clinical trials after a product is approved. These so-called Phase 4 studies may be made a condition to be satisfied after a drug receives approval. The results of Phase 4 studies can confirm the effectiveness of a product candidate and can provide important safety information to augment the FDA's voluntary adverse drug reaction reporting system. The product may be subject to withdrawal of the approval if effectiveness is not confirmed in the Phase 4 studies. Any products manufactured or distributed by us pursuant to FDA approvals would be subject to continuing regulation by the FDA, including record-keeping requirements and reporting of adverse experiences with the drug. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with good manufacturing practices, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. We cannot be certain that we or our present or future suppliers will be able to comply with the cGMP regulations and other FDA regulatory requirements. If our present or future suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a drug from distribution, or withdraw approval of the NDA for that drug. Furthermore, even after regulatory approval is obtained, later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market.

The FDA closely regulates the marketing and promotion of drugs. Approval may be subject to post-marketing surveillance and other record keeping and reporting obligations, and involve ongoing requirements. Product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising, and potential civil and criminal penalties. Physicians may prescribe legally available drugs for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturers' communications on the subject of off-label use.

Special Protocol Assessments

A clinical trial sponsor may submit a request for a special protocol assessment (SPA) from the FDA. Under the SPA procedure, a sponsor may seek the FDA's agreement on the design and size of a clinical trial intended to form the primary basis of an effectiveness claim. If the FDA agrees in writing, its agreement may not be changed after the trial begins, except in limited circumstances, such as when a substantial scientific issue essential to determining the safety and effectiveness of a product candidate is identified after a Phase 3 clinical trial is commenced and agreement is obtained with the FDA. If the outcome of the trial is successful, the sponsor will ordinarily be able to rely on it as the primary basis for approval with respect to effectiveness. The FDA, however, may make an approval decision based on a number of factors, including the degree of clinical benefit, and the FDA is not obligated to approve an NDA as a result of an SPA, even if the clinical outcome is positive.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory

review and approval process. If a product that has orphan drug designation subsequently receives FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same disease, except in limited circumstances, for seven years. These circumstances are an inability to supply the drug in sufficient quantities or a situation in which a new formulation of the drug has shown superior safety or efficacy. This exclusivity, however, also could block the approval of our product for seven years if a competitor obtains earlier approval of the same drug for the same indication.

Anti-Kickback and False Claims Laws

In the United States, we are subject to various federal and state laws pertaining to healthcare "fraud and abuse," including anti-kickback and false claims laws. The federal Anti-Kickback Law makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully solicit, offer, receive or pay any remuneration, directly or indirectly, in exchange for, or to induce, the referral of business, including the purchase, order or prescription of a particular drug, for which payment may be made under federal healthcare programs such as Medicare and Medicaid. Violations of the law are punishable by up to five years in prison, criminal fines, administrative civil money penalties, and exclusion from participation in federal healthcare programs. In addition, many states have adopted laws similar to the federal Anti-Kickback Law. Some of these state prohibitions apply to referral of patients for healthcare services reimbursed by any source, not only the Medicare and Medicaid programs. Due to the breadth of these laws, and the potential for additional legal or regulatory change addressing some of our practices, it is possible that our practices or our relationships with physicians might be challenged under anti-kickback laws, which could harm us.

False claims laws prohibit anyone from knowingly presenting, or causing to be presented, for payment to third-party payors (including Medicare and Medicaid) claims for reimbursed items or services, including drugs, that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. Our future activities relating to the reporting of wholesaler or estimated retail prices for our products, the reporting of Medicaid rebate information and other information affecting federal, state and third-party reimbursement of our products, and the sale and marketing of our products, are subject to scrutiny under these laws. In addition, pharmaceutical companies have been prosecuted under the federal False Claims Act in connection with their off-label promotion of drugs. Penalties for a violation include three times the actual damages sustained by the government, plus mandatory civil penalties of between $5,500 and $11,000 for each separate false claim. In addition, certain states have enacted laws modeled after the federal False Claims Act. If the government were to allege that we were, or convict us of, violating these false claims laws, we could be subject to a substantial fine and suffer a decline in our stock price.

Drug Price Competition and Patent Term Restoration Act of 1984

Under the Drug Price Competition and Patent Term Restoration Act of 1984, known as the Hatch-Waxman Amendments, a portion of a product's patent term that was lost during clinical development and application review by the FDA may be restored. The Hatch-Waxman Amendments also provide for a statutory protection, known as nonpatent market exclusivity, against the FDA's acceptance or approval of certain competitor applications. The Hatch-Waxman Amendments also provide the legal basis for the approval of abbreviated new drug applications, or ANDAs, for generic drugs.

Patent term restoration can compensate for patent life lost during product development and the regulatory review process by returning up to five years of patent life for a patent that covers a new product or its use. This period is generally one-half the time between the effective date of an IND (falling after issuance of the patent) and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Patent term restorations, however, are subject to a maximum extension of five years, and the patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years. The application for patent term extension is subject to approval by the United States Patent and Trademark Office in conjunction

with the FDA. It takes at least six months to obtain approval of the application for patent term extension. Up to five years of interim one year extensions are available if a product is still undergoing development or FDA review at the time of its expiration.

The Hatch-Waxman Amendments also provide for a period of statutory protection for new drugs that receive NDA approval from the FDA. If a new drug receives NDA approval as a new chemical entity, meaning that the FDA has not previously approved any other new drug containing the same active moiety, then the Hatch-Waxman Amendments prohibit an abbreviated new drug application or an NDA where the applicant does not own or have a legal right of reference to all of the data required for approval, or a "505(b)(2)" NDA, to be submitted by another company for a generic version of such drug, with some exceptions, for a period of five years from the date of approval of the NDA. The statutory protection provided pursuant to the Hatch-Waxman Amendments will not prevent the filing or approval of a full NDA. In order to gain approval of a full NDA, however, a competitor would be required to conduct its own preclinical investigations and clinical trials. If NDA approval is received for a new drug containing an active ingredient that was previously approved by the FDA but the NDA is for a drug that includes an innovation over the previously approved drug, for example, an NDA approval for a new indication or formulation of the drug with the same active ingredient, and if such NDA approval was dependent upon the submission to the FDA of new clinical investigations, other than bioavailability studies, then the Hatch-Waxman Amendments prohibit the FDA from making effective the approval of an ANDA or a 505(b)(2) NDA for a generic version of such drug for a period of three years from the date of the NDA approval. This three year exclusivity, however, only covers the innovation associated with the NDA to which it attaches. Thus, the three year exclusivity does not prohibit the FDA, with limited exceptions, from approving ANDAs or 505(b)(2) NDAs for drugs containing the same active ingredient but without the new innovation.

While the Hatch-Waxman Amendments provide certain patent term restoration and exclusivity protections to innovator drug manufacturers, it also permits the FDA to approve ANDAs for generic versions of their drugs. The ANDA process permits competitor companies to obtain marketing approval for a drug with the same active ingredient for the same uses but does not require the conduct and submission of clinical trials demonstrating safety and effectiveness for that product. Instead of safety and effectiveness data, an ANDA applicant needs only to submit data demonstrating that its product is bioequivalent to the innovator product as well as relevant chemistry, manufacturing and control data. The Hatch-Waxman Amendments also instituted a third type of drug application that requires the same information as an NDA including full reports of clinical and preclinical studies except that some of the information from the reports required for marketing approval comes from studies which the applicant does not own or have a legal right of reference. This type of application, a "505(b)(2) NDA," permits a manufacturer to obtain marketing approval for a drug without needing to conduct or obtain a right of reference for all of the required studies.

Finally, the Hatch-Waxman Amendments require, in some circumstances, an ANDA or a 505(b)(2) NDA applicant to notify the patent owner and the holder of the approved NDA of the factual and legal basis of the applicant's opinion that the patent listed by the holder of the approved NDA in FDA's Orange Book is not valid or will not be infringed (the patent certification process). Upon receipt of this notice, the patent owner and the NDA holder have 45 days to bring a patent infringement suit in federal district court and obtain a 30-month stay against the company seeking to reference the NDA. The NDA holder could still file a patent suit after the 45 days, but if they did, they would not have the benefit of the 30-month stay. Alternatively, after this 45-day period, the applicant may file a declaratory judgment action, seeking a determination that the patent is invalid or will not be infringed. Depending on the circumstances, however, the applicant may not be able to demonstrate a controversy sufficient to confer jurisdiction on the court. The discovery, trial and appeals process in such suits can take several years. If such a suit is commenced, the Hatch-Waxman Act provides a 30-month stay on the approval of the competitor's ANDA or 505(b)(2) NDA. If the litigation is resolved in favor of the competitor or the challenged patent expires during the 30-month period, unless otherwise extended by court order, the stay is lifted and the FDA may approve the application. Under regulations recently issued by the FDA, and essentially codified under the recent Medicare prescription drug legislation, the patent owner and the NDA holder have the opportunity to trigger only a single 30-month stay per ANDA or 505(b)(2) NDA.

Foreign Approvals

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval of a product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, we may submit marketing authorizations either under a centralized or decentralized procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessment report, each member state must decide whether to recognize approval.

The policies of the FDA and foreign regulatory authorities may change and additional government regulations may be enacted which could prevent or delay regulatory approval of our investigational drugs or approval of new diseases for our existing products. We cannot predict the likelihood, nature or extent of adverse governmental regulation that might arise from future legislative or administrative action, either in the United States or abroad.

Other Government Regulation

Our research and development activities use biological and hazardous materials that are dangerous to human health and safety or the environment. We are subject to a variety of federal, state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials and wastes resulting from these materials. We are also subject to regulation by the Occupational Safety and Health Administration, or OSHA, the California and federal environmental protection agencies and to regulation under the Toxic Substances Control Act. OSHA or the California or federal EPA may adopt regulations that may affect our research and development programs. We are unable to predict whether any agency will adopt any regulations that could have a material adverse effect on our operations. We have incurred, and will continue to incur, capital and operating expenditures and other costs in the ordinary course of our business in complying with these laws and regulations.

Employees

As of December 31, 2010, we had 36 full-time employees, including 14 who hold Ph.D. and/or M.D. degrees. Twenty nine of our employees are engaged in research and development, and our remaining employees are management or administrative staff. None of our employees is subject to a collective bargaining agreement. We believe that we have good relations with our employees.

Our Corporate Information

We were incorporated in Delaware on October 17, 2001. Our principal executive offices are located at 1300 Seaport Boulevard, Suite 500, Redwood City, California, 94063. Our telephone number is (650) 474-8200.

Available Information

We file electronically with the Securities and Exchange Commission, or SEC, our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) or 15(d)

of the Exchange Act. The SEC maintains an Internet site that contains reports, proxy information and information statements, and other information regarding issuers that file electronically with the SEC. The address of that website is http://www.sec.gov. The materials are also available at the SEC's Public Reference Room, located at 100 F Street, Washington, D.C. 20549. The public may obtain information through the public reference room by calling the SEC at 1-800-SEC-0330.

You may obtain a free copy of our annual report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports on the day of filing with the SEC on our website at http://www.thresholdpharm.com or by contacting the Investor Relations Department at our corporate offices by calling (650) 474-8200.

ITEM 1A. RISK FACTORS

RISKS RELATED TO OUR BUSINESS

Risks Related to Drug Discovery, Development and Commercialization

We are substantially dependent upon the success of TH-302.

We have focused our development activities on TH-302 and we do not presently have other compounds in clinical development. The failure of TH-302 to achieve successful clinical trial endpoints, delays in clinical or development of TH-302, unanticipated adverse side effects related to TH-302 or any other adverse developments or information related to TH-302 would significantly harm our business and the value of our common stock.

Although we obtained a special protocol assessment for TH-302 for soft tissue sarcoma, a special protocol assessment does not guarantee any particular outcome from regulatory review, including any regulatory approval.

We have obtained a special protocol assessment, or SPA, for the registration trial for TH-302 for the treatment of soft tissue sarcoma in the United States. The SPA process allows for Food and Drug Administration, or FDA, evaluation of a clinical trial protocol intended to form the primary basis of an efficacy claim in support of a new drug application, or NDA, and provides a product sponsor with an agreement confirming that the design and size of a trial will be appropriate to form the primary basis of an efficacy claim for an NDA if the trial is performed according to the SPA. Even if we believe that the data from a clinical trial are supportive, an SPA is not a guarantee of approval, and we cannot be certain that the design of, or data collected from, a trial will be adequate to demonstrate safety and efficacy, or otherwise be sufficient to support regulatory approval. There can be no assurance that the terms of an SPA will ultimately be binding on the FDA, and the FDA is not obligated to approve an NDA, if any, even if the clinical outcome is positive. The FDA retains significant latitude and discretion in interpreting the terms of an SPA and the data and results from a clinical trial, and can require trial design changes or additional studies if issues arise essential to determining safety or efficacy. Data may subsequently become available that causes the FDA to reconsider the previously agreed upon scope of review and the FDA may have subsequent safety or efficacy concerns that override an SPA, and we can give no assurance that as clinical trials proceed or as part of an NDA review process, if any, the FDA will determine that a previously approved SPA is still valid.

Additionally, an SPA may be changed only with written agreement of the FDA and sponsor, and any further changes we may propose to the protocol will remain subject to the FDA's approval. The FDA may not agree to any such amendment and, even if they agree, they may request other amendments to the trial design that could require additional cost and time, as well as increase the degree of difficulty in reaching clinical endpoints. As a result, even with an SPA, we cannot be certain that the trial results will be found to be adequate to support an efficacy claim and product approval.

Pre-clinical studies and Phase 1 or 2 clinical trials of TH-302 may not predict the results of subsequent human clinical trials.

Pre-clinical studies, including studies of our product candidates in animal models of disease, may not accurately predict the result of human clinical trials of those product candidates. In particular, promising animal studies suggesting the efficacy of TH-302 for the treatment of different types of cancer may not accurately predict the ability of TH-302 to treat cancer effectively in humans. TH-302 may be found not to be efficacious in treating cancer, alone or in combination with other agents, when studied in human clinical trials. In addition, we will not be able to commercialize our drug candidates until we obtain FDA approval in the United States or approval by comparable regulatory agencies in Europe and other countries. To satisfy FDA or foreign regulatory approval standards for the commercial sale of our product candidates, we must demonstrate in adequate and controlled clinical trials that our product candidates are safe and effective. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful. Our initial results from clinical trials of

TH-302 in Phase 1 and Phase 2 clinical trials may not be confirmed by later analysis or subsequent larger clinical trials. A number of companies in the pharmaceutical industry, including us, have suffered significant setbacks in advanced clinical trials, even after obtaining promising results in earlier clinical trials.

Our product candidates must undergo rigorous clinical testing, the results of which are uncertain and could substantially delay or prevent us from bringing them to market.

Before we can obtain regulatory approval for a product candidate, we must undertake extensive clinical testing in humans to demonstrate safety and efficacy to the satisfaction of the FDA or other regulatory agencies. Clinical trials of new drug candidates sufficient to obtain regulatory marketing approval are expensive and take years to complete.

We cannot be certain of successfully completing clinical testing within the time frame we have planned, or at all. We may experience numerous unforeseen events during, or as a result of, the clinical trial process that could delay or prevent us from receiving regulatory approval or commercializing our product candidates, including the following:

- our clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical and/or preclinical testing or to abandon programs;
- the results obtained in earlier stage clinical testing may not be indicative of results in future clinical trials;
- clinical trial results may not meet the level of statistical significance required by the FDA or other regulatory agencies;
- enrollment in our clinical trials for our product candidates may be slower than we anticipate, resulting in significant delays and additional expense;
- we, or regulators, may suspend or terminate our clinical trials if the participating patients are being exposed to unacceptable health risks; and
- the effects of our product candidates on patients may not be the desired effects or may include undesirable side effects or other characteristics that may delay or preclude regulatory approval or limit their commercial use, if approved.

Completion of clinical trials depends, among other things, on our ability to enroll a sufficient number of patients, which is a function of many factors, including:

- the therapeutic endpoints chosen for evaluation;
- the eligibility criteria defined in the protocol;
- the perceived benefit of the investigational drug under study;
- the size of the patient population required for analysis of the clinical trial’s therapeutic endpoints;
- our ability to recruit clinical trial investigators and sites with the appropriate competencies and experience;
- our ability to obtain and maintain patient consents; and
- competition for patients by clinical trial programs for other treatments.

We may experience difficulties in enrolling patients in our clinical trials, which could increase the costs or affect the timing or outcome of these clinical trials. This is particularly true with respect to diseases with relatively small patient populations.

We are subject to significant regulatory approval requirements, which could delay, prevent or limit our ability to market our product candidates.

Our research and development activities, preclinical studies, clinical trials and the anticipated manufacturing and marketing of our product candidates are subject to extensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in Europe and elsewhere. We require the approval of the relevant regulatory authorities before we may commence commercial sales of our product candidates in a given market. The regulatory approval process is expensive and time-consuming, and the timing of receipt of regulatory approval is difficult to predict. Our product candidates could require a significantly longer time to gain regulatory approval than expected, or may never gain approval. We cannot be certain that, even after expending substantial time and financial resources, we will obtain regulatory approval for any of our product candidates. A delay or denial of regulatory approval could delay or prevent our ability to generate product revenues and to achieve profitability.

Changes in regulatory approval policies during the development period of any of our product candidates, changes in, or the enactment of, additional regulations or statutes, or changes in regulatory review practices for a submitted product application may cause a delay in obtaining approval or result in the rejection of an application for regulatory approval.

Regulatory approval, if obtained, may be made subject to limitations on the indicated uses for which we may market a product. These limitations could adversely affect our potential product revenues. Regulatory approval may also require costly post-marketing follow-up studies. In addition, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping related to the product will be subject to extensive ongoing regulatory requirements. Furthermore, for any marketed product, its manufacturer and its manufacturing facilities will be subject to continual review and periodic inspections by the FDA or other regulatory authorities. Failure to comply with applicable regulatory requirements may, among other things, result in fines, suspensions of regulatory approvals, product recalls, product seizures, operating restrictions and criminal prosecution.

Our product candidates are based on targeting the microenvironment of solid tumors, which currently is an unproven approach to therapeutic intervention.

Our product candidates are designed to target the microenvironment of solid tumors by, in the case of TH-302, harnessing hypoxia for selective toxin activation or by potentially exploiting the increased uptake of glucose in cancer cells relative to most normal cells. We have not, nor to our knowledge has any other company, received regulatory approval for a drug based on either of these approaches. We cannot be certain that our approaches will lead to the development of approvable or marketable drugs.

In addition, the FDA or other regulatory agencies may lack experience in evaluating the safety and efficacy of drugs based on these targeting approaches, which could lengthen the regulatory review process, increase our development costs and delay or prevent commercialization of our product candidates.

Our product candidates may have undesirable side effects that prevent or delay their regulatory approval or limit their use if approved.

Anti-tumor drugs being developed by us, including TH-302, are expected to have undesirable side effects. For example, in clinical trials of TH-302, some patients have exhibited skin and/or mucosal toxicities that have in some cases caused patients to stop or delay therapy. The extent, severity and clinical significance of these or other undesirable side effects may not be apparent initially and may be discovered or become more significant during drug development or even post-approval. These expected side effects or other side effects identified in the course of our clinical trials or that may otherwise be associated with our product candidates may outweigh the benefits of our product candidates. Side effects may prevent or delay regulatory approval or limit market acceptance if our products are approved.

Delays in clinical testing could result in increased costs to us and delay our ability to obtain regulatory approval and commercialize our product candidates.

Significant delays in clinical testing could materially impact our product development costs and delay regulatory approval of our product candidates. We do not know whether planned clinical trials will need to be redesigned or will be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including adverse safety events experienced during our clinical trials and delays in:

- obtaining regulatory approval to commence a clinical trial;
- obtaining clinical materials;
- reaching agreement on acceptable clinical trial agreement terms with prospective sites;
- obtaining institutional review board approval to conduct a clinical trial at a prospective site; and
- recruiting patients to participate in a clinical trial.

We have not yet developed a commercial formulation of TH-302.

The formulation of TH-302 that we are using for clinical trials is subject to storage and handling requirements that may not be suitable for commercial product. We are working to develop a formulation of TH-302 that will be suitable for commercial product, but there can be no assurance that we will be able to do so in a timely manner, if at all. If we are not able to develop a commercial formulation, we may delay registrational trials of TH-302.

Orphan drug exclusivity affords us limited protection, and if another party obtains orphan drug exclusivity for the drugs and indications we are targeting, we may be precluded from commercializing our product candidates in those indications.

For those drugs that meet the eligible requirements, we intend to seek orphan drug designation for the cancer indications that our drug candidates are intended to treat. Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is defined by the FDA as a disease or condition that affects fewer than 200,000 individuals in the United States. The company that obtains the first FDA approval for a designated orphan drug indication receives marketing exclusivity for use of that drug for that indication for a period of seven years. Orphan drug exclusive marketing rights may be lost if the FDA later determines that the request for designation was materially defective, or if the manufacturer is unable to assure sufficient quantity of the drug. Orphan drug designation does not shorten the development or regulatory review time of a drug.

Orphan drug exclusivity may not prevent other market entrants. A different drug, or, under limited circumstances, the same drug may be approved by the FDA for the same orphan indication. The limited circumstances include an inability to supply the drug in sufficient quantities or where a new formulation of the drug has shown superior safety or efficacy. As a result, if our product were to be approved and received orphan drug status, the FDA could still approve other drugs for use in treating the same indication covered by our product, which could create a more competitive market for us.

Moreover, due to the uncertainties associated with developing pharmaceutical products, we may not be the first to obtain marketing approval for any orphan drug indication. Even if we obtain orphan drug designation, if a competitor obtains regulatory approval for TH-302 for the same indication we are targeting before we do, we would be blocked from obtaining approval for that indication for seven years, unless our product is a new formulation of the drug that has shown superior safety or efficacy, or the competitor is unable to supply sufficient quantities.

Even if we obtain regulatory approval, our marketed drugs will be subject to ongoing regulatory review. If we fail to comply with continuing United States and foreign regulations, we could lose our approvals to market drugs and our business would be seriously harmed.

Following initial regulatory approval of any drugs we may develop, we will be subject to continuing regulatory review, including review of adverse drug experiences and clinical results that are reported after our drug products become commercially available. This would include results from any post-marketing tests or vigilance required as a condition of approval. The manufacturer and manufacturing facilities we use to make any of our drug candidates will also be subject to periodic review and inspection by the FDA. If a previously unknown problem or problems with a product or a manufacturing and laboratory facility used by us is discovered, the FDA or foreign regulatory agency may impose restrictions on that product or on the manufacturing facility, including requiring us to withdraw the product from the market. Any changes to an approved product, including the way it is manufactured or promoted, often require FDA approval before the product, as modified, can be marketed. We and our contract manufacturers will be subject to ongoing FDA requirements for submission of safety and other post-market information. If we and our contract manufacturers fail to comply with applicable regulatory requirements, a regulatory agency may:

- issue warning letters;
- impose civil or criminal penalties;
- suspend or withdraw our regulatory approval;
- suspend or terminate any of our ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications filed by us;
- impose restrictions on our operations;
- close the facilities of our contract manufacturers; or
- seize or detain products or require a product recall.

The FDA and foreign regulatory authorities may impose significant restrictions on the indicated uses and marketing of pharmaceutical products.

FDA rules for pharmaceutical promotion require that a company not promote an unapproved drug or an approved drug for an unapproved use. In addition to FDA requirements, regulatory and law enforcement agencies, such as the United States Department of Health and Human Services' Office of Inspector General and the United States Department of Justice, monitor and investigate pharmaceutical sales, marketing and other practices. For example, sales, marketing and scientific/educational grant programs must comply with the Medicare-Medicaid Anti-Fraud and Abuse Act, as amended, the False Claims Act, as amended, and similar state laws. In recent years, actions by companies' sales forces and marketing departments have been scrutinized intensely to ensure, among other things, that actions by such groups do not qualify as "kickbacks" to healthcare professionals. A "kickback" refers to the provision of any item of value to a healthcare professional or other person in exchange for purchasing, recommending, or referring an individual for an item or service reimbursable by a federal healthcare program. These kickbacks increase the expenses of the federal healthcare program and may result in civil penalties, criminal prosecutions, and exclusion from participation in government programs, any of which would adversely affect our financial condition and business operations. In addition, even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which would also harm our financial condition. Comparable laws also exist at the state level.

We are, and in the future may be, subject to new federal and state requirements to submit information on our open and completed clinical trials to public registries and databases.

In 1997, a public registry of open clinical trials involving drugs intended to treat serious or life-threatening diseases or conditions was established under the Food and Drug Administration Modernization Act, or FDMA, in

order to promote public awareness of and access to these clinical trials. Under FDMA, pharmaceutical manufacturers and other clinical trial sponsors are required to post the general purpose of these clinical trials, as well as the eligibility criteria, location and contact information of the clinical trials. Since the establishment of this registry, there has been significant public debate focused on broadening the types of clinical trials included in this or other registries, as well as providing for public access to clinical trial results. A voluntary coalition of medical journal editors has adopted a resolution to publish results only from those clinical trials that have been registered with a no-cost, publicly accessible database, such as http://www.clinicaltrials.gov. The Pharmaceuticals and Research Manufacturers of America has also issued voluntary principles for its members to make results from certain clinical trials publicly available and has established a website for this purpose. Other groups have adopted or are considering similar proposals for clinical trial registration and the posting of clinical trial results. The state of Maine has enacted legislation, with penalty provisions, requiring the disclosure of results from clinical trials involving drugs marketed in the state, and similar legislation has been introduced in other states. Federal legislation was introduced in the fall of 2004 to expand http://www.clinicaltrials.gov and to require the inclusion of clinical trial results in this registry. In some states, such as New York, prosecutors have alleged that a lack of disclosure of clinical trial information constitutes fraud, and these allegations have resulted in settlements with pharmaceutical companies that include agreements to post clinical trial results. Our failure to comply with any clinical trial posting requirements could expose us to negative publicity, fines, and other penalties, all of which could materially harm our business.

Risks Related to Our Financial Performance and Operations

We have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and our future profitability is uncertain.

We are a development stage company with a limited operating history and no current source of revenue from the sale of our product candidates. We have incurred losses in each year since our inception in 2001, and we expect to incur losses for the foreseeable future. We have devoted, and will continue to devote for the foreseeable future, substantially all of our resources to research and development of our product candidates. For the year ended December 31, 2010, we had a net loss of $18.7 million and our cumulative net loss since our inception through December 31, 2010 was $226.5 million. Clinical trials are costly. We do not expect to generate any revenue from the sale of our product candidates in the near term, and we expect to continue to have significant losses for the foreseeable future.

To attain profitability, we will need to develop products successfully and market and sell them effectively. We cannot predict when we will become profitable, if at all. We have never generated revenue from the sale of our product candidates, and there is no guarantee that we will be able to do so in the future. If we fail to become profitable, or if we are unable to fund our continuing losses, we would be unable to continue our research and development programs.

We are likely to require substantial additional funding and may be unable to raise capital when needed, which could force us to delay, reduce or eliminate our drug discovery, product development and commercialization activities.

Developing drugs, conducting clinical trials, and commercializing products is expensive. Our future funding requirements will depend on many factors, including:

- the terms and timing of any collaborative, licensing, acquisition or other arrangements that we may establish;
- the progress and cost of our clinical trials and other research and development activities;
- the costs and timing of obtaining regulatory approvals;
- the costs of filing, prosecuting, defending and enforcing any patent applications, claims, patents and other intellectual property rights;

- the cost and timing of securing manufacturing capabilities for our clinical product candidates and commercial products, if any; and
- the costs of lawsuits involving us or our product candidates.

We believe that our existing cash, cash equivalents and marketable securities as of December 31, 2010, along with net proceeds from our at market issuances and March 2011 offering will be sufficient to fund our projected operating requirements into the third quarter of 2012, including prosecuting our current clinical trials, conducting research and discovery efforts towards additional product candidates, working capital and general corporate purposes. We expect that we will need to raise additional capital to complete existing clinical trials, start new trials, or to in-license or otherwise acquire and develop additional products or programs. We expect to seek funds through arrangements with collaborators or others that may require us to relinquish rights to certain products candidates that we might otherwise seek to develop or commercialize independently. We cannot be certain that we will be able to enter into any such arrangements on reasonable terms, if at all.

We expect to need to raise additional capital or incur indebtedness to continue to fund our future operations. We may seek to raise capital through a variety of sources, including:

- the public equity market;
- private equity financing;
- collaborative arrangements;
- licensing arrangements; and/or
- public or private debt.

Our ability to raise additional funds will depend, in part on our clinical and regulatory events, entry into collaboration or license agreement with others and factors related to financial, economic and market conditions, many of which are beyond our control. We cannot be certain that sufficient funds will be available to us when required or on satisfactory terms, if at all. If adequate funds are not available, we may be required to significantly reduce or refocus our operations or to obtain funds through arrangements that may require us to relinquish rights to certain of our products, technologies or potential markets, any of which could delay or require that we curtail or eliminate some or all of our development programs or otherwise have a material adverse effect on our business, financial condition and results of operations. In addition, we may have to delay, reduce the scope of or eliminate some of our research and development, which could delay the time to market for any of our product candidates, if adequate funds are not available.

If we are unable to secure additional financing on a timely basis or on terms favorable to us, we may be required to cease or reduce certain research and development projects, to sell some or all of our technology or assets or to merge all or a portion of our business with another entity. Insufficient funds may require us to delay, scale back, or eliminate some or all of our activities, and if we are unable to obtain additional funding, there is uncertainty regarding our continued existence.

Our success depends in part on retaining and motivating key personnel and, if we fail to do so, it may be more difficult for us to execute our business strategy. As a small organization we are dependent on key employees and may need to hire additional personnel to execute our business strategy successfully.

Our success depends on our continued ability to attract, retain and motivate highly qualified management, clinical and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists. We are highly dependent upon our senior management and scientific staff, particularly our Chief Executive Officer, Dr. Harold E. Selick, President and Chief Medical Officer, Dr. John M. Curd and Senior Vice President of Discovery Research, Dr. Mark G. Matteucci. We do not have employment agreements with Drs. Selick, Curd or Matteucci. The loss of the services of Drs. Selick, Curd

or Matteucci or one or more of our other key employees could delay or have an impact on the successful completion of our clinical trials or the development of additional product candidates.

As of December 31, 2010, we had 36 employees. Our success will depend on our ability to retain and motivate remaining personnel and hire additional qualified personnel when required. Competition for qualified personnel in the biotechnology field is intense. We face competition for personnel from other biotechnology and pharmaceutical companies, universities, public and private research institutions and other organizations. We may not be able to attract and retain qualified personnel on acceptable terms given the competition for such personnel. If we are unsuccessful in our retention, motivation and recruitment efforts, we may be unable to execute our business strategy.

Our facilities in California are located near an earthquake fault, and an earthquake or other natural disaster or resource shortage could disrupt our operations.

Important documents and records, such as hard copies of our laboratory books and records for our product candidates, are located in our corporate headquarters at a single location in Redwood City, California, near active earthquake zones. In the event of a natural disaster, such as an earthquake, drought or flood, or localized extended outages of critical utilities or transportation systems, we do not have a formal business continuity or disaster recovery plan, and could therefore experience a significant business interruption. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and could result in additional expense. Although we maintain business interruption insurance coverage, the policy specifically excludes coverage for earthquake and flood.

Risks Related to Our Dependence on Third Parties

We rely on third parties to manufacture TH-302. If these parties do not manufacture the active pharmaceutical ingredients or finished drug products of satisfactory quality, in a timely manner, in sufficient quantities or at an acceptable cost, clinical development and commercialization of our product candidates could be delayed.

We do not currently own or operate manufacturing facilities; consequently, we rely and expect to continue to rely on third parties for the production of clinical and commercial quantities of our product candidates. We have not yet entered into any long term manufacturing or supply agreement for any of our product candidates. Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our ability to develop and commercialize any product candidates on a timely and competitive basis.

We expect to have sufficient TH-302 API and drug product to meet the clinical supply demands of our clinical trials for the next 12 months. Additional clinical trial material continues to be manufactured as required. We have ordered additional API and drug product; however, we will need to obtain additional supplies of TH-302 API and drug product to complete any other additional trials. The need for additional supplies may require manufacturing process improvements in TH-302 API and drug product. If we are not successful in procuring sufficient TH-302 clinical trial material, we may experience a significant delay in our TH-302 clinical program.

We will need to enter into additional agreements for additional supplies of each of our product candidates to complete clinical development and/or commercialize them. We cannot be certain that we can do so on favorable terms, if at all. The products will need to satisfy all cGMP manufacturing requirements, including passing specifications. Our inability to satisfy these requirements could delay our clinical programs.

If any of our product candidates is approved by the FDA or other regulatory agencies for commercial sale, we will need to have it manufactured in commercial quantities. We may not be able to increase the

manufacturing capacity for any of our product candidates in a timely or economic manner successfully or at all. Significant scale-up of manufacturing may require additional validation studies, which the FDA and other regulatory agencies must review and approve. If we are unable to successfully increase the manufacturing capacity for a product candidate, the regulatory approval or commercial launch of that product candidate may be delayed, or there may be a shortage of supply which could limit our sales.

In addition, if the facility or the equipment in the facility that produces our product candidates is significantly damaged or destroyed, or if the facility is located in another country and trade or commerce with such country is interrupted, we may be unable to replace the manufacturing capacity quickly or inexpensively. The inability to obtain manufacturing agreements, the damage or destruction of a facility on which we rely for manufacturing or any other delays in obtaining supply would delay or prevent us from completing our clinical trials and commercializing our current product candidates.

We have no control over our manufacturers' and suppliers' compliance with manufacturing regulations, and their failure to comply could result in an interruption in the supply of our product candidates.

The facilities used by our contract manufacturers must undergo an inspection by the FDA for compliance with current good manufacturing practice, or cGMP regulations, before the respective product candidates can be approved. In the event these facilities do not receive a satisfactory cGMP inspection for the manufacture of our product candidates, we may need to fund additional modifications to our manufacturing process, conduct additional validation studies, or find alternative manufacturing facilities, any of which would result in significant cost to us as well as a delay of up to several years in obtaining approval for such product candidate. In addition, our contract manufacturers, and any alternative contract manufacturer we may utilize, will be subject to ongoing periodic inspection by the FDA and corresponding state and foreign agencies for compliance with cGMP regulations, similar foreign regulations and other regulatory standards. We do not have control over our contract manufacturers' compliance with these regulations and standards. Any failure by our third-party manufacturers or suppliers to comply with applicable regulations could result in sanctions being imposed on them (including fines, injunctions and civil penalties), failure of regulatory authorities to grant marketing approval of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecution.

We rely on third parties to conduct some of our clinical trials, and their failure to perform their obligations in a timely or competent manner may delay development and commercialization of our product candidates.

We may use clinical research organizations to assist in conduct of our clinical trials. There are numerous alternative sources to provide these services. However, we may face delays outside of our control if these parties do not perform their obligations in a timely or competent fashion or if we are forced to change service providers. This risk is heightened for clinical trials conducted outside of the United States, where it may be more difficult to ensure that clinical trials are conducted in compliance with FDA requirements. Any third-party that we hire to conduct clinical trials may also provide services to our competitors, which could compromise the performance of their obligations to us. If we experience significant delays in the progress of our clinical trials and in our plans to file NDAs, the commercial prospects for product candidates could be harmed and our ability to generate product revenue would be delayed or prevented.

We are dependent on Eleison to develop and commercialize glufosfamide

We are dependent upon Eleison Pharmaceuticals, Inc., to whom we exclusively licensed glufosfamide in October 2009, to develop and commercialize glufosfamide. Any profit sharing or other payments to us under the Eleison license depend almost entirely upon the efforts of Eleison, which may not be able to raise sufficient funds to commence clinical development activities with glufosfamide. Even if Eleison is successful at raising initial funding, it may not be successful in developing and commercializing glufosfamide or raising sufficient funds for development and commercialization. We may also be asked to provide technical assistance related to

the development of glufosfamide, which may divert our resources from other activities. If the Eleison license terminates in such a way that glufosfamide reverts to us and we seek alternative arrangements with one or more other parties to develop and commercialize glufosfamide, we may not be able to enter into such an agreement with another suitable third party or third parties on acceptable terms or at all.

Risks Related to Our Intellectual Property

Hypoxia activated prodrug technology is not a platform technology broadly protected by patents, and others may be able to develop competitive drugs using this approach.

Although we have one issued patent that covers a category of hypoxia-activated prodrugs, including TH-302, we have no issued patents or pending patent applications that would prevent others from taking advantage of hypoxia activated prodrug technology generally to discover and develop new therapies for cancer or other diseases. Consequently, our competitors may seek to discover and develop potential therapeutics that operate by mechanisms of action that are the same or similar to the mechanisms of action of our hypoxia activated prodrug product candidates.

Targeting the increased uptake of glucose and the increased reliance on glycolysis as an energy source in cancer cells is not protected by patents, and others may be able to develop competitive drugs using this approach.

We have not issued patents or pending patent applications that would prevent others from taking advantage of targeting the increased uptake of glucose and the increased reliance of glycolysis as an energy source in solid tumors to discover and develop new therapies for cancer or other diseases. Consequently, our competitors may seek to discover and develop potential therapeutics that operate by mechanisms of action that are the same or similar to the mechanisms of action of our product candidates.

We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the marketing of our products, our ability to commercialize products could suffer.

Our commercial success will depend in part on our ability to obtain and maintain patent protection sufficient to prevent others from marketing our product candidates, as well as to defend and enforce these patents against infringement and to operate without infringing the proprietary rights of others. We will only be able to protect our product candidates from unauthorized use by third parties to the extent that valid and enforceable patents cover our product candidates or their manufacture or use if they are effectively protected by trade secrets. If our patent applications do not result in issued patents, or if our patents are found to be invalid, we will lose the ability to exclude others from making, using or selling the inventions claimed therein. We have a limited number of patents and pending patent applications.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date in the United States. The laws of many countries may not protect intellectual property rights to the same extent as United States laws, and those countries may lack adequate rules and procedures for defending our intellectual property rights. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. We do not know whether any of our patent applications will result in the issuance of any patents and we cannot predict the breadth of claims that may be allowed in our patent applications or in the patent applications we license from others.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we might not have been the first to make the inventions covered by each of our pending patent applications and issued patents, and we may have to participate in expensive and protracted interference proceedings to determine priority of invention;
- we might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative product candidates or duplicate any of our product candidates;
- our pending patent applications may not result in issued patents;
- our issued patents may not provide a basis for commercially viable products or may not provide us with any competitive advantages or may be challenged by third parties;
- others may design around our patent claims to produce competitive products that fall outside the scope of our patents;
- we may not develop additional patentable proprietary technologies related to our product candidates; or
- the patents of others may prevent us from marketing one or more of our product candidates for one or more indications that may be valuable to our business strategy.

Moreover, an issued patent does not guarantee us the right to practice the patented technology or commercialize the patented product. Third parties may have blocking patents that could be used to prevent us from commercializing our patented products and practicing our patented technology. Our issued patents and those that may be issued in the future may be challenged, invalidated or circumvented, which could limit our ability to prevent competitors from marketing the same or related product candidates or could limit the length of the term of patent protection of our product candidates. In addition, the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of the patent. Patent term extensions may not be available for these patents.

We rely on trade secrets and other forms of non-patent intellectual property protection. If we are unable to protect our trade secrets, other companies may be able to compete more effectively against us.

We rely on trade secrets to protect certain aspects of our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect, especially in the pharmaceutical industry, where much of the information about a product must be made public during the regulatory approval process. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secret information is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to or may not protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

If we are sued for infringing intellectual property rights of third parties or if we are forced to engage in an interference proceeding, it will be costly and time consuming, and an unfavorable outcome in that litigation or interference would have a material adverse effect on our business.

Our ability to commercialize our product candidates depends on our ability to develop, manufacture, market and sell our product candidates without infringing the proprietary rights of third parties. Numerous United States and foreign issued patents and pending patent applications, which are owned by third parties, exist in the general field of cancer therapies or in fields that otherwise may relate to our product candidates. If we are shown to infringe, we could be enjoined from use or sale of the claimed invention if we are unable to prove that the patent is invalid. In addition, because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our product candidates or any other compound that we may develop, may infringe, or which may trigger an interference proceeding regarding one of our owned or licensed patents or applications. There could also be existing patents of which we are not aware that our product candidates may inadvertently infringe or which may become involved in an interference proceeding.

The biotechnology and biopharmaceutical industries are characterized by the existence of a large number of patents and frequent litigation based on allegations of patent infringement. For so long as our product candidates are in clinical trials, we believe our clinical activities fall within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States, which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA. As our clinical investigational drugs progress toward commercialization, the possibility of a patent infringement claim against us increases. While we attempt to ensure that our active clinical investigational drugs and the methods we employ to manufacture them, as well as the methods for their use we intend to promote, do not infringe other parties' patents and other proprietary rights, we cannot be certain they do not, and competitors or other parties may assert that we infringe their proprietary rights in any event.

We may be exposed to future litigation based on claims that our product candidates, or the methods we employ to manufacture them, or the uses for which we intend to promote them, infringe the intellectual property rights of others. Our ability to manufacture and commercialize our product candidates may depend on our ability to demonstrate that the manufacturing processes we employ and the use of our product candidates do not infringe third-party patents. If third-party patents were found to cover our product candidates or their use or manufacture, we could be required to pay damages or be enjoined and therefore unable to commercialize our product candidates, unless we obtained a license. A license may not be available to us on acceptable terms, if at all.

Risks Related To Our Industry

If our competitors are able to develop and market products that are more effective, safer or more affordable than ours, or obtain marketing approval before we do, our commercial opportunities may be limited.

Competition in the biotechnology and pharmaceutical industries is intense and continues to increase, particularly in the area of cancer treatment. Most major pharmaceutical companies and many biotechnology companies are aggressively pursuing oncology development programs, including traditional therapies and therapies with novel mechanisms of action. Our cancer product candidates face competition from established biotechnology and pharmaceutical companies, including sanofi-aventis, AstraZeneca PLC, Genentech, Inc., Bayer Corporation, Eli Lilly and Company and Pfizer, Inc. and from generic pharmaceutical manufacturers. In particular, our drug candidates for pancreatic cancer will compete with Gemzar, marketed by Eli Lilly and Company, doxorubicin, cisplatin, paclitaxel, ifosfamide, and 5-flurouracil, or 5-FU, a generic product which is sold by many manufacturers. In addition, several drugs marketed for different indications, such as Camptosar ®, marketed by Pfizer, Inc., Erbitux®, marketed by Imclone Systems Inc. and Bristol-Myers Squibb Company, Taxotere ®, marketed by sanofi-aventis, DTIC-Dome®, marketed by Bayer Pharmaceuticals Corporation, Xeloda ®, marketed by Hoffmann-LaRoche, Inc., Avastin®, marketed by Genentech, Inc., Nexavar®, marketed by Onyx Pharmaceuticals, Inc. and Bayer AG, and Alimta ®, marketed by Eli Lilly and Company, are under

investigation or have completed investigation as combination therapies or monotherapy for pancreatic, prostate, ovarian, non small cell lung and small cell lung cancers, melanoma and soft tissue sarcoma. Additionally OSI Pharmaceuticals, Inc. and Genentech, Inc. market Tarceva ® as a combination therapy with gemcitabine for the first-line treatment of pancreatic cancer. In addition, Proacta Inc. has a compound under clinical investigation that targets the hypoxic zones of tumors, as our TH-302 clinical product candidate is intended to do. Novacea has conducted studies on AQ4N and sanofi-aventis recently completed a Phase 3 clinical trial on Tirapazamine, a hypoxically activated prodrug, and while Novacea has stopped current clinical development of AQ4N and sanofi-aventis has released rights to the compound to the innovator SRI, another company may pursue further clinical development of either compound. Celgene Corporation is conducting clinical trials of Abraxene® as a combination therapy for first-line treatment of pancreatic cancer. ZIOPHARM Oncology Inc. is conducting clinical trials of a compound as a combination therapy for first-line treatment of advanced soft tissue sarcoma.

We also face potential competition from academic institutions, government agencies and private and public research institutions engaged in the discovery and development of drugs and therapies. Many of our competitors have significantly greater financial resources and expertise in research and development, preclinical testing, conducting clinical trials, obtaining regulatory approvals, manufacturing, sales and marketing than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established pharmaceutical companies.

Our competitors may succeed in developing products that are more effective, have fewer side effects and are safer or more affordable than our product candidates, which would render our product candidates less competitive or noncompetitive. These competitors also compete with us to recruit and retain qualified scientific and management personnel, establish clinical trial sites and patient registration for clinical trials, as well as to acquire technologies and technology licenses complementary to our programs or advantageous to our business. Moreover, competitors that are able to achieve patent protection obtain regulatory approvals and commence commercial sales of their products before we do, and competitors that have already done so, may enjoy a significant competitive advantage.

There is a substantial risk of product liability claims in our business. If we do not obtain sufficient liability insurance, a product liability claim could result in substantial liabilities.

Our business exposes us to significant potential product liability risks that are inherent in the development, manufacturing and marketing of human therapeutic products. Regardless of merit or eventual outcome, product liability claims may result in:

- delay or failure to complete our clinical trials;
- withdrawal of clinical trial participants;
- decreased demand for our product candidates;
- injury to our reputation;
- litigation costs;
- substantial monetary awards against us; and
- diversion of management or other resources from key aspects of our operations.

If we succeed in marketing products, product liability claims could result in an FDA investigation of the safety or efficacy of our products, our manufacturing processes and facilities or our marketing programs. An FDA investigation could also potentially lead to a recall of our products or more serious enforcement actions, or limitations on the indications, for which they may be used, or suspension or withdrawal of approval.

We have product liability insurance that covers our clinical trials up to a $5 million annual aggregate limit. We intend to expand our insurance coverage to include the sale of commercial products if marketing approval is obtained for our product candidates or any other compound that we may develop. However, insurance coverage is expensive and we may not be able to maintain insurance coverage at a reasonable cost or at all, and the insurance coverage that we obtain may not be adequate to cover potential claims or losses.

Even if we receive regulatory approval to market our product candidates, the market may not be receptive to our product candidates upon their commercial introduction, which would negatively affect our ability to achieve profitability.

Our product candidates may not gain market acceptance among physicians, patients, healthcare payors and the medical community. The degree of market acceptance of any approved products will depend on a number of factors, including:

- the effectiveness of the product;
- the prevalence and severity of any side effects;
- potential advantages or disadvantages over alternative treatments;
- relative convenience and ease of administration;
- the strength of marketing and distribution support;
- the price of the product, both in absolute terms and relative to alternative treatments; and
- sufficient third-party coverage or reimbursement.

If our product candidates receive regulatory approval but do not achieve an adequate level of acceptance by physicians, healthcare payors and patients, we may not generate product revenues sufficient to attain profitability.

If third-party payors do not adequately reimburse patients for any of our product candidates, if approved for marketing, we may not be successful in selling them.

Our ability to commercialize any products successfully will depend in part on the extent to which reimbursement will be available from governmental and other third-party payors, both in the United States and in foreign markets. Even if we succeed in bringing one or more products to the market, the amount reimbursed for our products may be insufficient to allow us to compete effectively and could adversely affect our profitability.

Reimbursement by a governmental and other third-party payor may depend upon a number of factors, including a governmental or other third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining reimbursement approval for a product from each third-party and governmental payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of our products to each payor. We may not be able to provide data sufficient to obtain reimbursement.

Eligibility for coverage does not imply that any drug product will be reimbursed in all cases or at a rate that allows us to make a profit. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not become permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on payments allowed for lower-cost drugs that are already reimbursed, may be incorporated into existing payments for other products or services and may reflect budgetary constraints and/or Medicare or Medicaid data used to calculate these rates. Net prices for products also may be reduced by mandatory discounts or rebates required by government health care programs or by any future relaxation of laws that restrict imports of certain medical products from countries where they may be sold at lower prices than in the United States.

The health care industry is experiencing a trend toward containing or reducing costs through various means, including lowering reimbursement rates, limiting therapeutic class coverage and negotiating reduced payment schedules with service providers for drug products. The Medicare Prescription Drug, Improvement and Modernization Act of 2003, or MMA, became law in November 2003 and created a broader prescription drug benefit for Medicare beneficiaries. The MMA also contains provisions intended to reduce or eliminate delays in the introduction of generic drug competition at the end of patent or nonpatent market exclusivity. The impact of the MMA on drug prices and new drug utilization over the next several years is unknown. The MMA also made adjustments to the physician fee schedule and the measure by which prescription drugs are presently paid, changing from Average Wholesale Price to Average Sales Price. The effects of these changes are unknown but may include decreased utilization of new medicines in physician prescribing patterns, and further pressure on drug company sponsors to provide discount programs and reimbursement support programs. There have been, and we expect that there will continue to be, federal and state proposals to constrain expenditures for medical products and services, which may affect reimbursement levels for our future products. In addition, the Centers for Medicare & Medicaid Services frequently change product descriptors, coverage policies, product and service codes, payment methodologies and reimbursement values. Third-party payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates and may have sufficient market power to demand significant price reductions.

Foreign governments tend to impose strict price controls, which may adversely affect our future profitability.

In some foreign countries, particularly in the European Union, prescription drug pricing is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our profitability will be negatively affected.

We may incur significant costs complying with environmental laws and regulations, and failure to comply with these laws and regulations could expose us to significant liabilities.

Our research and development activities use biological and hazardous materials that are dangerous to human health and safety or the environment. We are subject to a variety of federal, state and local laws and regulations governing the use, generation, manufacture, storage, handling and disposal of these materials and wastes resulting from these materials. We are also subject to regulation by the Occupational Safety and Health Administration, or OSHA, the California and federal environmental protection agencies and to regulation under the Toxic Substances Control Act. OSHA or the California or federal Environmental Protection Agency, or EPA, may adopt regulations that may affect our research and development programs. We are unable to predict whether any agency will adopt any regulations that could have a material adverse effect on our operations. We have incurred, and will continue to incur, capital and operating expenditures and other costs in the ordinary course of our business in complying with these laws and regulations.

Although we believe our safety procedures for handling and disposing of these materials comply with federal, state and local laws and regulations, we cannot entirely eliminate the risk of accidental injury or contamination from the use, storage, handling or disposal of hazardous materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could significantly exceed our insurance coverage.

Risks Related To Our Common Stock

We may not maintain the listing of our common stock on the NASDAQ Capital Market.

Our ability to raise additional capital may be dependent upon our stock being quoted on the NASDAQ Capital Market. Previously, we had fallen out of compliance with continued listing requirements because our common stock did not comply with the $1.00 minimum bid price requirement for continued listing set forth in NASDAQ Marketplace Rule 5450(a)(1) (formerly Rule 4450(a)(5)). To regain compliance, effective August 20, 2008, we implemented a 1-for-6 reverse stock split of our common stock. After that date, our common stock traded above the minimum $1.00 bid price for at least ten consecutive business days and on September 5, 2008, the NASDAQ Stock Market notified us that we had regained compliance with the minimum bid price requirements. Even though we regained compliance with the minimum bid price, we cannot assure you that we will be able to maintain compliance with the minimum bid price requirement or other listing requirements in the future, and our failure to do so could result in the delisting of our shares from the NASDAQ Capital Market.

A significant number of shares of our common stock are subject to issuance upon exercise of outstanding warrants, which upon such exercise would result in dilution to our security holders.

On October 5, 2009, we issued outstanding warrants to purchase an aggregate of 7,329,819 shares of our common stock, at an exercise price of $2.23 per share, which exercise price was subsequently reduced to $2.05 per share on March 16, 2011 under the anti-dilution provisions of the warrants as a result of our March 2011 registered offering of common stock and warrants. In addition, on August 29, 2008, we issued outstanding warrants to purchase an aggregate of 3,588,221 shares of our common stock, at an exercise price of $2.34 per share, which exercise price was subsequently reduced to $1.86 per share on October 5, 2009 under the anti-dilution provisions of the warrants as a result of our October 2009 private placement. The exercise price and/or the number of shares of common stock issuable upon exercise of the warrants may be adjusted in certain circumstances, including certain issuances of securities at a price equal to less than the then current exercise price (which could happen, for example, in connection with sales of stock under our at market issuance sales agreement dated October 29, 2010), subdivisions and stock splits, stock dividends, combinations, reorganizations, reclassifications, consolidations, mergers or sales of properties and assets and upon the issuance of certain assets or securities to holders of our common stock, as applicable. Although we cannot determine at this time which of these warrants will ultimately be exercised, it is reasonable to assume that such warrants will be exercised only if the exercise price is below the market price of our common stock. To the extent the warrants are exercised, additional shares of our common stock will be issued that will be eligible for resale in the public market, which will result in dilution to our security holders. The issuance of additional securities could also have an adverse effect on the market price of our common stock.

The price of our common stock has been and may continue to be volatile.

The stock markets in general, the markets for biotechnology stocks and, in particular, the stock price of our common stock, have experienced extreme volatility.

Price declines in our common stock could result from general market and economic conditions and a variety of other factors, including:

- adverse results or delays in our clinical trials;
- announcements of FDA non-approval of our product candidates, or delays in the FDA or other foreign regulatory agency review process;

- adverse actions taken by regulatory agencies with respect to our product candidates, clinical trials, manufacturing processes or sales and marketing activities;
- announcements of technological innovations, patents or new products by our competitors;
- regulatory developments in the United States and foreign countries;
- any lawsuit involving us or our product candidates;
- announcements concerning our competitors, or the biotechnology or pharmaceutical industries in general;
- developments concerning any strategic alliances or acquisitions we may enter into;
- actual or anticipated variations in our operating results;
- changes in recommendations by securities analysts or lack of analyst coverage;
- deviations in our operating results from the estimates of analysts;
- sales of our common stock by our executive officers, directors and five percent stockholders or sales of substantial amounts of common stock; and
- loss of any of our key scientific or management personnel.

In the past, following periods of volatility in the market price of a particular company's securities, litigation has often been brought against that company. Any such lawsuit could consume resources and management time and attention, which could adversely affect our business.

If our officers, directors and largest stockholders choose to act together, they may be able to control our management and operations, acting in their best interests and not necessarily those of other stockholders.

As of December 31, 2010, our officers, directors and other affiliates beneficially owned in excess of 30.4% of our common stock, assuming the full exercise of all outstanding warrants. As a result, these stockholders, acting together, will be able to significantly influence all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other business combination transactions. The interests of this group of stockholders may not always coincide with the interests of other stockholders, and they may act in a manner that advances their best interests and not necessarily those of other stockholders.

Our certificate of incorporation, our bylaws and Delaware law contain provisions that could discourage another company from acquiring us and may prevent attempts by our stockholders to replace or remove our current management.

Provisions of Delaware law, where we are incorporated, our certificate of incorporation and bylaws may discourage, delay or prevent a merger or acquisition that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace or remove our board of directors. These provisions include:

- authorizing the issuance of "blank check" preferred stock without any need for action by stockholders;
- providing for a classified board of directors with staggered terms;
- requiring supermajority stockholder voting to effect certain amendments to our certificate of incorporation and bylaws;
- eliminating the ability of stockholders to call special meetings of stockholders;
- prohibiting stockholder action by written consent; and
- establishing advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings.

In addition, in August 2006, our board of directors adopted a preferred shares rights agreement, the provisions of which could make it more difficult for a potential acquirer to consummate a transaction without the approval of our board of directors.

We have never paid dividends on our common stock and we do not anticipate paying any cash dividends in the foreseeable future.

We have never declared or paid cash dividends on our common stock. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be our stockholders' sole source of gain for the foreseeable future.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We subleased approximately 33,700 square feet of laboratory and office space in Redwood City, California under an agreement that originally terminated in February 2010. On February 3, 2006, we entered into a lease for additional 34,205 square feet of office space at our Redwood City headquarters and extended the original lease for the 33,700 square feet, both of which terminate in September 2011. We lease an additional 6,489 square feet of laboratory space in Redwood City, California under an agreement that originally terminated on February 2010. On November 17, 2009, we extended the term of the lease agreement to expire in August 2012. We believe these facilities are suitable and adequate for our current needs and that adequate facilities will be available to support our needs following termination of our existing leases.

ITEM 3. LEGAL PROCEEDINGS

Except as previously disclosed in our quarterly report on Form 10-Q for the quarter ending June 30, 2010, which we filed with the SEC on August 5, 2010, we are not a party to any material legal proceedings.

ITEM 4. [REMOVED AND RESERVED]

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock has been traded on the NASDAQ Capital Market under the symbol "THLD" since August 20, 2008 and the NASDAQ Global Market from February 4, 2005 to August 19, 2008. Prior to that time there was no public market for our stock. The following table lists quarterly information on the price range of our common stock based on the high and low reported sale prices for our common stock as reported by the NASDAQ Capital Market and the NASDAQ Global Market for the periods indicated below, respectively. These prices do not include retail markups, markdowns or commissions.

	High	Low
Year Ended December 31, 2010:		
First Quarter	$2.43	$1.65
Second Quarter	$2.15	$1.20
Third Quarter	$1.83	$0.98
Fourth Quarter	$1.48	$1.07
Year Ended December 31, 2009:		
First Quarter	$1.54	$0.53
Second Quarter	$2.57	$1.17
Third Quarter	$2.08	$1.10
Fourth Quarter	$3.87	$1.70

We estimate that there were approximately 103 holders of record of our common stock as of March 16, 2011.

Dividends

We have never declared or paid any dividends on our capital stock. We currently intend to retain any future earnings to fund the development and expansion of our business, and therefore we do not anticipate paying cash dividends on our common stock in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in future financing instruments and other factors our board of directors deems relevant.

Recent Sales of Unregistered Securities

None.

Use of Proceeds From Sale of Registered Securities

None

Equity Compensation Plans

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2010:

	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans (1)(2)
Equity compensation plans approved by stockholders	2,745,918	$ 1.36	1,150,178
Equity compensation plans not approved by stockholders	—	—	—
Total	2,745,918	$ 1.36	1,150,178

(1) Includes 384,330 shares of common stock issuable under our 2004 Employee Stock Purchase Plan.

(2) On January 1, 2011, and annually thereafter, the authorized shares for the 2004 Equity Incentive Plan will automatically be increased by a number of shares equal to the lesser of:

- 5% of the number of our shares issued and outstanding prior to the preceding December 31;
- 1,250,000 shares; or
- an amount determined by our board of directors.

ITEM 6. SELECTED FINANCIAL DATA

We are a development stage company. The following selected statement of operations data for the years ended December 31, 2010, 2009 and 2008 and balance sheet data as of December 31, 2010 and 2009 have been derived from our audited financial statements included elsewhere in this Annual Report on Form 10-K. The following selected statement of operations data for years ended December 31, 2007 and 2006, and balance sheet data as of December 31, 2008, 2007 and 2006 are derived from our financial statements not included in this Annual Report on Form 10-K. The selected financial data set forth below have been prepared in accordance with accounting principles generally accepted in the United States of America and should be read together with our financial statements and the related notes to those financial statements, as well as "Management's Discussion and Analysis of Financial Condition and Results of Operations," appearing elsewhere in this Annual Report on Form 10-K. In August 2008, our Board of Directors approved a 1-for-6 reverse split of its common stock, effective August 20, 2008. Accordingly, all references to common shares of stock and net loss per common share have been retroactively adjusted to reflect the reverse split.

As discussed in Note 9 in Item 8 "Financial Statements and Supplementary Data", on January 1, 2006, we began accounting for stock options and stock purchase rights under a fair value method and accounting of stock-based compensation expense in our consolidated financial statements over the requisite service period.

	Years Ended December 31,				
	2010	2009	2008	2007	2006
	(In thousands, except per share data)				
Revenue	$ —	$ —	$ 1,440	$ 1,436	$ 1,461
Operating expenses:					
Research and development (1)	18,937	15,844	13,440	23,375	46,267
General and administrative (1)	4,971	5,480	6,734	10,411	14,453
Total operating expenses	23,908	21,324	20,174	33,786	60,720
Loss from operations	(23,908)	(21,324)	(18,734)	(32,350)	(59,259)
Interest income (expense), net	60	(13)	442	1,686	3,573
Other income (expense), net	5,166	(2,311)	—	—	—
Net loss attributable to common stockholders	(18,682)	(23,648)	(18,292)	(30,664)	(55,686)
Net loss per common share:					
Basic and diluted	$ (0.56)	$ (1.21)	$ (1.97)	$ (4.97)	$ (9.20)
Weighted average number of shares used in net loss per common share calculations:					
Basic and diluted	33,654	19,594	9,275	6,176	6,056
(1) Includes employee and non-employee non-cash stock-based compensation of:					
Research and development	$ 381	$ 1,003	$ 1,504	$ 2,413	$ 5,008
General and administrative	$ 422	$ 1,208	$ 1,748	$ 3,496	$ 5,141

	As of December 31,				
	2010	2009	2008	2007	2006
	(In thousands)				
Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$14,699	$37,315	$22,337	$22,693	$52,810
Working capital	12,129	34,783	20,292	17,884	43,698
Total assets	16,204	48,685	24,531	25,814	57,034
Notes payable, less current portion	—	—	—	337	1,247
Total liabilities	11,261	26,028	3,117	6,227	12,796
Redeemable convertible preferred stock	—	—	—	—	—
Total stockholders' equity (deficit)	4,943	22,657	21,414	19,587	44,238

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties, including those set forth under the heading "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Our actual results and the timing of selected events discussed below could differ materially from those expressed in, or implied by, these forward-looking statements.

Overview

We are 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 as a consequence of disordered blood vessel growth. This hypoxic environment is known to be resistant to standard chemotherapy and radiation. It is thought to be responsible for the poor prognosis of patients with solid tumors and treating the hypoxic environment is currently believed to be a significant unmet medical need. Our hypoxia activated prodrug ("HAP") product candidates, including TH-302 are designed to specifically target the hypoxic microenvironment of tumors by selective activation of the prodrug to release a potent cytotoxin.

Our focus is on product candidates for the treatment of patients with cancer. Our clinical development efforts are currently focused on one product candidate 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 severe hypoxic conditions that are believed to be present in all solid tumors. TH-302 is currently in Phase 1, Phase 1/2 and Phase 2 clinical trials. In June 2010, we reported updated top-line results from the Phase 1 monotherapy trial of TH-302 including updated data in patients with metastatic melanoma and small-cell lung cancer (SCLC). We also reported updated top-line interim results from each of four Phase 1/2 combination therapy investigations of a chemotherapy agent plus TH-302 including updated data in patients with first-line pancreatic cancer treated with gemcitabine plus TH-302 and in patients with soft tissue sarcoma treated with doxorubicin plus TH-302. In October 2010, we reported updated top-line results from our Phase 1/2 combination therapy trial, including updated data in patients with first-line pancreatic cancer treated with gemcitabine plus TH-302. We reported updated top-line results from the Phase 1 monotherapy and Phase 1/2 combination therapy trials in the fourth quarter of 2010, including updated data in patients with soft tissue sarcoma treated with doxorubicin plus TH-302. We also initiated two clinical studies in the second quarter of 2010: a Phase 1 open label clinical trial of TH-302 in patients with advanced leukemias and a randomized, controlled Phase 2 trial of TH-302 in combination with gemcitabine in patients with first-line pancreatic cancer. We reported top-line results from the Phase 1 open label clinical trial in advanced leukemias in the fourth quarter of 2010 and expect to report updated top line results in the second half of 2011. We also expect to report top line efficacy analysis results from the randomized Phase 2 trial at the end of 2011. We have reached agreement with the FDA on the design and planned analysis of pivotal Phase 3 trial in patients with soft tissue sarcoma. As part of the Special Protocol Assessment (SPA) submission, the FDA has agreed that the design and planned analysis of the proposed Phase 3 trial adequately addresses the objectives necessary to support a regulatory submission. We expect to initiate the pivotal Phase 3 trial in the middle of 2011.

We are working to broaden the applicability of TH-302 to other cancers as well as to discover additional hypoxia activated prodrugs 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. In October 2009, we completed an offering of common stock and warrants that raised net proceeds of $33.1 million. As of December 31, 2010 we had cash, cash equivalents and marketable securities of $14.7 million. Our net loss for the year ended December 31, 2010 was $18.7 million, and our cumulative net loss since our inception through December 31, 2010 was $226.5 million. In February and March 2011, we raised net proceeds of $1.8 million through the sale of common stock pursuant to our at market issuance facility. In March 2011, we completed an offering of common stock and warrants that raised net proceeds of approximately $27.8 million, which includes underwriter discounts and estimated offering costs.

We expect to continue to devote substantial resources to research and development in future periods as we execute our current clinical trials, start additional clinical trials and continue our discovery efforts. Research and development expenses are expected to be higher in 2011 compared to 2010 due to the continued execution of existing clinical trials and initiation of new clinical trials. We believe that our existing cash, cash equivalents and marketable securities as of December 31, 2010, along with net proceeds from our at market issuances and March 2011 offering will be sufficient to fund our projected operating requirements into the third quarter of 2012, including prosecuting our current ongoing clinical trials and conducting research and discovery efforts toward additional product candidates, working capital and general corporate purposes. We expect that we will need to raise additional capital to complete existing clinical trials and initiate new trials in 2011. Research and development expenses may fluctuate significantly from period to period as a result of the progress and results of our clinical trials.

Revenue

We have not generated any revenue from the sale of our product candidates since our inception and do not expect to generate any revenue from the sale of our product candidates in the near term. From 2004 to 2008, we recognized $5.0 million in revenue related to the upfront payment received in connection with a 2004 agreement with MediBIC for the development of glufosfamide in Japan and several other Asian countries. The payment was contingent upon the finalization of the clinical development plan, which occurred in July 2005. Revenue has been recognized on a straight-line basis over the estimated development period, through December 31, 2008. In 2009, the Company had no further responsibilities for development activities under this agreement and in May 2009, the Company dissolved the Joint Development Committee (“JDC”) comprising MediBIC and us. No payments were made by either party as a result of the dissolution of the JDC.

Research and Development Expenses

Research and development expenses consist primarily of costs of conducting clinical trials, salaries and related costs for personnel including non-cash stock-based compensation, costs of clinical materials, costs for research projects and preclinical studies, costs related to regulatory filings, and facility costs. Contracting and consulting expenses are a significant component of our research and development expenses as we rely on consultants and contractors in many of these areas. We recognize expenses as they are incurred. Our accruals for expenses associated with preclinical and clinical studies and contracts associated with clinical materials are based upon the terms of the service contracts, the amount of services provided and the status of the activities. We expect annual research and development expenses will increase in the future as we progress with larger clinical trials. From inception through December 31, 2010, we incurred an aggregate of $178.6 million on research and development expenses, including non-cash stock-based compensation expense.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for our personnel in the executive, finance, patent, accounting and other administrative functions, including non-cash stock-based compensation, as well as consulting costs for functions for which we either do not staff or only partially staff, including public relations, market research and recruiting. Other costs include professional fees for legal and

accounting services, insurance and facility costs. From inception through December 31, 2010, we incurred an aggregate of $63.5 million on general and administrative expenses, including non-cash stock-based compensation expense.

Stock-Based Compensation

We recognize stock-based compensation in accordance with the fair value provisions of Accounting Standard Codification ("ASC") 718,*"Compensation—Stock Compensation"*, using the modified prospective transition method, except for options granted prior to our initial public offering in February 2005, for which the fair value was determined for disclosure purposes using the minimum value method. Refer to the discussion of accounting treatment of stock based compensation below under ***Critical Accounting Policies***.

Results of Operations for the Years Ended December 31, 2010 and 2009

Revenue

For the years ended December 31, 2010 and 2009, no revenue was recognized.

Research and Development

Research and development expenses were $18.9 million for the year ended December 31, 2010, compared to $15.8 million for the year ended December 31, 2009. The $3.1 million increase in expenses is due to a $3.6 million increase in clinical and development expenses, $0.6 million in higher staffing expenses and $0.1 million in higher consulting expenses. These increases were partially offset by a $0.5 million cash grant and a $0.2 million decrease in facilities expenses. In addition, stock-based compensation expense decreased by $0.6 million primarily due to lower valuations for 2010 stock option grants resulting from a lower stock price.

	Years ended December 31,		
Research and development expenses by project (in thousands)	**2010**	**2009**	**2008**
TH-302	$16,159	$11,086	$ 6,876
Glufosfamide	—	246	1,976
2DG*	—	197	414
Discovery research	2,778	4,315	4,174
Total research and development expenses	$18,937	$15,844	$13,440

* We discontinued development activities for 2DG in 2009.

Research and development expenses associated with our internally discovered compound TH-302 were $16.2 million for 2010 and $11.1 million for 2009. The increase of $5.1 million was primarily due to $3.8 million in clinical and manufacturing expenses, $1.0 million in employee related expenses and $0.3 million in consulting expenses. TH-302 continues to progress through the 401 trial, the 402 trial and the 403 trial. Enrollment in the 401 and the 402 trials was completed in the second quarter of 2010. The 403 trial was expanded and is expected to continue to enroll patients. In addition, in June 2010 the Company initiated a Phase 2 randomized controlled combination therapy clinical trial in patients with first-line pancreatic cancer and a Phase 1 monotherapy clinical trial in patients with advanced leukemias.

Discovery research and development expenses were $2.8 million for 2010 compared to $4.3 million for 2009. We continue to focus our efforts towards discovering and developing new drug candidates from our hypoxia activated prodrug platform.

Due to our exclusive licensing development and commercialization of glufosfamide to Eleison Pharmaceutical, Inc. in October 2009, we did not incur significant research and development expenses associated with glufosfamide for 2010. We incurred no significant expenses related to 2DG for the 2010 as we are not currently planning or conducting further additional clinical trials of 2DG.

We expect to continue to devote substantial resources to research and development in future periods as we complete our current clinical trials, start additional clinical trials and continue our discovery efforts. Research and development expenses are expected to increase in 2011 compared to 2010 due to the continued execution of existing clinical trials and start of new clinical trials.

General and Administrative

General and administrative expenses were $5.0 million for 2010, compared to $5.5 million for 2009. The $0.5 million decrease reflects a $0.8 million decrease in stock-based compensation, partially offset by $0.3 million in higher staffing and facilities expenses.

We currently expect our general and administrative expenses to remain approximately the same or to slightly increase in 2011 compared to 2010.

Interest Income (Expense), Net

Interest income (expense) net for 2010 was $0.1 million of interest income compared to $13,000 of net interest expense for 2009. The increase in net interest income was primarily due to the $0.1 million in interest expense related to notes payable that were repaid in 2009.

Other Income (Expense)

Other income (expense) for 2010 was non-cash income of $5.2 million compared to non-cash expense of $2.3 million, for 2009. The non cash income for 2010 compared to the non cash expense for 2009 was due to the decline during 2010 in the fair value of outstanding warrants to purchase 10.9 million shares of common stock warrants. ASC 815 *"Derivatives and Hedging"* requires that stock warrants with certain terms need to be accounted for as a liability with changes to their fair value recognized in the consolidated statement of operations.

Results of Operations for the Years Ended December 31, 2009 and 2008

Revenue

For the year ended December 31, 2009, no revenue was recognized. For the year ended December 31, 2008, we recognized $1.4 million in revenue related to a $5.0 million upfront payment received in connection with a 2004 agreement with MediBIC for the development of glufosfamide in Japan and several other Asian countries. Revenue was fully recognized on a straight-line basis through 2008, the estimated development period.

Research and Development

Research and development expenses were $15.8 million for the year ended December 31, 2009, compared to $13.4 million for the year ended December 31, 2008. The $2.4 million increase in expenses is due to a $2.0 million increase in clinical and development expenses, $0.5 million in higher staffing and facilities expenses and $0.4 million in higher consulting expenses. In addition, stock-based compensation expense decreased by $0.5 million primarily due to lower valuations for 2009 stock option grants resulting from a lower stock price.

Research and development expenses associated with our internally discovered compound TH-302 were $11.1 million for 2009 and $6.9 million for 2008. The increase of $4.2 million was primarily due to $2.4 million in clinical and manufacturing expenses and $1.1 million in employee related expenses. TH-302 continues to progress through the Phase 1 monotherapy clinical trial initiated in July 2007, for which in the first quarter of 2009, we expanded enrollment to explore activity in specific indications. In addition TH-302 continues to progress through the Phase 1/2 combination therapy clinical trial, which includes three separate treatment arms and a Phase 1/2 combination therapy clinical trial of TH-302 in combination with doxorubicin in patients with advanced soft tissue sarcoma, both of which were initiated in third quarter of 2008.

Research and development expenses associated with glufosfamide were $0.2 million for 2009 and $2.0 million for 2008. This decline in expenses was due to the completion and announcement of results for our Phase 2 trials in pancreatic cancer and soft-tissue sarcoma in 2007 and discontinuation of our Phase 2 trials in recurrent sensitive SCLC and platinum-resistant ovarian cancer in October 2007 and January 2008, respectively. In October 2009, we exclusively licensed development and commercialization of glufosfamide to Eleison and as a result, we do not expect to incur research and development expenses associated with glufosfamide in the future.

Research and development expenses associated with 2DG were $0.2 million for 2009 and $0.4 million for 2008, as we completed enrollment of our 2DG Phase 1 trial in second quarter of 2008 and announced results in third quarter of 2008. We are not currently planning or conducting any additional clinical trials of 2DG. Discovery research and development expenses were $4.3 million for 2009 and $4.2 million for 2008.

General and Administrative

General and administrative expenses were $5.5 million for 2009, compared to $6.7 million for 2008. The $1.2 million decrease reflects $0.5 million decrease in stock-based compensation, $0.4 million in lower staffing and facilities expense and $0.3 million in lower consulting expenses.

Interest Income (Expense), Net

Interest income (expense) net for 2009 was a net interest expense of $13,000 compared to net interest income of $0.4 million for 2008. The change was primarily due to lower invested cash, cash equivalents and marketable securities balances and lower interest rates during 2009 compared to the prior year.

Other Income (Expense)

Interest and other expense for the years ended December 31, 2009 was $2.3 million. There was no other income (expense) for 2008. The expense in 2009 was due to the revaluation of our warrant liability, which resulted in a charge of $2.3 million.

Liquidity and Capital Resources

We have incurred net losses since inception through December 31, 2010 of $226.5 million. We have not generated any product revenues and do not expect to generate revenue from the sale of product candidates in the near term. From inception until our initial public offering in February 2005, we funded our operations primarily through the private placement of our preferred stock. In February 2005, we completed our initial public offering of 1.0 million shares of our common stock (split adjusted), raising net proceeds of $38.1 million. In October 2005, we completed a public offering of 1.1 million shares of our common stock (split adjusted) for net proceeds of $62.4 million. In August 2008, we sold to certain investors an aggregate of 8,970,574 shares of our common stock for a purchase price equal to $2.04 per share and warrants exercisable for a total of 3,588,221 shares of our common stock with an exercise price equal to $2.34 per share (subject to adjustment). As a result of our October 2009 offering, the exercise price of the warrants exercisable for a total of 3,588,221 shares of common stock was reduced to $1.86 per share pursuant to the terms of such warrants. Net proceeds generated from the offering were $16.8 million.

In October 2009, we sold to certain investors an aggregate of 18,324,599 shares of our common stock for a purchase price equal to $1.86 per share and, for a purchase price equal to $0.05 per share, warrants exercisable for a total of 7,329,819 shares of our common stock for aggregate gross proceeds equal to $35.0 million in connection with the offering. The warrants had an exercise price equal to $2.23 per share (subject to adjustment). As a result of our March 2011 offering, the exercise price of the warrants exercisable for a total of 7,329,819 shares of common stock was reduced to $2.05 per share pursuant to the terms of such warrants. Net proceeds generated from the offering were $33.1 million.

In February and March 2011, we sold 717,132 shares of our common stock at an average price of $2.83 pursuant to our at market issuance facility, for net proceeds of $1.8 million.

In March 2011, we sold to certain investors an aggregate of 14,313,081 shares of our common stock for a purchase price equal to $2.05 per share and, for a purchase price equal to $0.05 per share, warrants exercisable for a total of 5,725,227 shares of our common stock for aggregate gross proceeds equal to $30.1 million in connection with the offering. The warrants have an exercise price equal to $2.46 per share. Net proceeds generated from the offering were approximately $27.8 million, which includes underwriter discounts and estimated offering costs.

In August 2008, our board of directors approved a 1-for-6 reverse split of our common stock, effective August 20, 2008. Accordingly, all references to common shares of stock have been retroactively adjusted to reflect the reverse split.

We had cash, cash equivalents and marketable securities of $14.7 million and $37.3 million at December 31, 2010 and 2009, respectively.

Net cash used in operating activities for the years ended December 31, 2010, 2009 and 2008 was $22.4 million, $17.8 million and $16.3 million, respectively. For the year ended December 31, 2010, cash used in operations was attributable to the net loss for the year after adding back non-cash charges for stock-based compensation expense and depreciation and amortization expenses, as well as an increase in accrued clinical development expenses, partially offset by revaluation of warrant liability. For the year ended December 31, 2009, cash used in operations was attributable to the net loss for the year after adding back non-cash charges for stock-based compensation expense, revaluation of warrant liability and depreciation and amortization expenses, as well as an increase in accrued clinical development expenses. For the year ended December 31, 2008, cash used in operations was attributable to the net loss for the year after adding back non-cash charges for stock-based compensation expense and depreciation and amortization expenses, offset by a decrease in accrued liabilities and a decrease in deferred revenue.

Net cash provided by investing activities for the year ended December 31, 2010 was $22.1 million, primarily due to proceeds from sales and maturities of marketable securities of $37.4 million, offset by purchases of investments of $15.2 million. Net cash used in investing activities for the year ended December 31, 2009 was $21.5 million, primarily due to purchases of marketable securities of $35.0 million, offset by proceeds from sales and maturities of investments of $13.5 million. Net cash provided by investing activities for the year ended December 31, 2008 was $4.4 million, primarily due to proceeds from sales and maturities of investments of $13.7 million, offset by purchases of marketable securities of $9.2 million.

Net cash provided by financing activities was $6,000 for the year ended December 31, 2010, due to proceeds from the sale of stock under our equity incentive plans, partially offset by deferred offering costs. Net cash provided by financing activities was $32.7 million for the year ended December 31, 2009, reflecting the $33.1 million net proceeds from the sale of our common stock in October 2009, offset by repayments of notes payable totaling $0.3 for the year. Net cash provided by financing activities was $15.9 million for the year ended December 31, 2008, reflecting the $16.8 million net proceeds from the sale of our common stock in August 2008, offset by repayments of notes payable totaling $0.9 for the year. We expect 2011 cash requirements to be in the range of $27.0 million to $29.0 million.

We believe that our existing cash, cash equivalents and marketable securities as of December 31, 2010, along with net proceeds from our at market issuances and March 2011 offering will be sufficient to fund our projected operating requirements into the third quarter of 2012 including prosecuting our current trials, conducting research and discovery efforts towards additional product candidates, working capital and general corporate purposes. We expect that we will need to raise additional capital to complete clinical trials that we started in 2010.

We expect to need to raise additional capital or incur indebtedness to continue to fund our future operations. We may seek to raise capital through a variety of sources, including:

- the public equity market;
- private equity financing;
- collaborative arrangements;
- licensing arrangements; and/or
- public or private debt.

Our ability to raise additional funds will depend on our clinical and regulatory events, our ability to identify promising in-licensing opportunities, and factors related to financial, economic, and market conditions, many of which are beyond our control. We cannot be certain that sufficient funds will be available to us when required or on satisfactory terms. If adequate funds are not available, we may be required to significantly reduce or refocus our operations or to obtain funds through arrangements that may require us to relinquish rights to certain of our products, technologies or potential markets, any of which could delay or require that we curtail our development programs or otherwise have a material adverse effect on our business, financial condition and results of operations. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities would result in ownership dilution to our existing stockholders.

In addition, our ability to raise additional capital may be dependent upon our stock being quoted on the NASDAQ Capital Market and our compliance with continued listing requirements. If we are unable to secure additional financing on a timely basis or on terms favorable to us, we may be required to cease or reduce certain research and development projects, to sell some or all of our technology or assets or to merge all or a portion of our business with another entity. Insufficient funds may require us to delay, scale back, or eliminate some or all of our activities, and if we are unable to obtain additional funding, there is uncertainty regarding our continued existence.

Obligations and Commitments

In March 2003, we entered into a loan and security agreement with a financial institution to borrow up to $1.0 million for working capital and equipment purchases. As of December 31, 2004, we had borrowed the full amount under this facility. At December 31, 2007, all borrowing under this facility had been fully repaid. In April 2006, we amended the existing loan and security agreement to borrow up to an additional $4.0 million for working capital and equipment purchases. The interest rate for borrowings under this facility was determined based on the 36-month U.S. Treasury note plus 2.25% on the date of borrowing. We borrowed $2.6 million under this facility, which was repaid over a 36-month period from the date of borrowing. The interest rate on these borrowings was approximately 7.2% per annum. At June 30, 2009, borrowings under this facility were paid in full.

In August 2004, we entered into a noncancelable facilities sublease agreement that expired on February 28, 2010 for our headquarters in Redwood City, California. In February 2006, we entered into a lease for an additional 34,205 square feet of office space and extended the lease term for the existing space located at our headquarters in Redwood City, California to September 30, 2011. The lease is for a period of 66 months, beginning on April 1, 2006 with respect to the additional square footage and began on March 1, 2010 with respect to the square footage previously leased under our August 2004 sublease agreement. The lease will expire, unless otherwise terminated under the terms of the lease, on September 30, 2011. The aggregate rent for the term of the lease is approximately $4.8 million. In addition, the lease requires us to pay certain taxes, assessments, fees and other costs and expenses associated with the premises as well as a customary management fee. We are also responsible for the costs of certain tenant improvements associated with the leased space. In connection with the lease, we furnished a letter of credit to the landlord for approximately $0.5 million.

On April 1, 2005, we entered into a noncancelable facilities lease agreement that originally expired on February 28, 2010 for an additional 6,489 square feet of laboratory space in Redwood City, California. On November 17, 2009, we extended the term of the lease agreement to expire in August 2012.

Our major outstanding contractual obligations consist of amounts due under our financing and lease agreements, and purchase commitments. Contractual obligations and related scheduled payments as of December 31, 2010, are as follows (in thousands):

	Within one year	One to three years	Four to five years	After five years	Total
Facilities sublease and lease	$1,284	$ 106	$	$ —	$1,390
Purchase commitments	1,922	—	—	—	1,922
Total	$3,206	$ 106	$	$ —	$3,312

At Market Issuance Facility

On October 29, 2010, we entered into an at market issuance sales agreement, or sales agreement, with McNicoll, Lewis & Vlak LLC, or MLV, pursuant to which we may issue and sell shares of our common stock having an aggregate offering price of up to $15.0 million from time to time through MLV as our sales agent. Sales of our common stock through MLV will be made on The NASDAQ Capital Market, on any other existing trading market for our common stock, to or through a market maker or as otherwise agreed by MLV and us. Subject to the terms and conditions of the sales agreement, MLV will use commercially reasonable efforts to sell our common stock from time to time, based upon our instructions (including any price, time or size limits or other customary parameters or conditions we may impose). We will pay MLV an aggregate commission rate of 3.0% of the gross proceeds of the sales price per share of any common stock sold under the sales agreement. Under certain circumstances, sales of the stock under the at market issuances sales agreement could result in an adjustment to the exercise price of certain of our outstanding warrants. The number of shares we are able to sell under this arrangement will be limited in practice based on the trading volume of our common stock. As of December 31, 2010 we had not sold any stock pursuant to the sales agreement. In February and March 2011, we sold 717,132 shares of our common stock at an average price of $2.83 pursuant to the sales agreement. Net proceeds from the sale of stock were $1.8 million. The sale of the stock did not result in an adjustment to the exercise price of certain of our outstanding warrants. On March 11, 2011, we filed a prospectus supplement reducing the amount of securities for sale under our shelf registration statement pursuant to the sales agreement. The maximum aggregate gross proceeds from potential future sales of common stock under our existing shelf registration statement are $3.8 million.

License and Development Agreements

On October 14, 2009, we entered into an exclusive license agreement with Eleison Pharmaceuticals, Inc. (“Eleison”). Pursuant to the agreement we granted Eleison exclusive worldwide rights to develop and commercialize glufosfamide for the treatment of cancer in humans and animals, and certain other uses. Under the agreement, Eleison is responsible for the development, manufacturing and marketing of glufosfamide. Eleison and Threshold will share equally in the profits of commercialization, if the further clinical development of glufosfamide leads to regulatory approval and marketing.

Eleison will pay us 50% of its profits from commercialization on a quarterly basis, beginning on the date of first commercial sale, if any. Eleison has the right to sublicense some or all of its rights under the agreement, and will pay us 50% of amounts received under any sublicenses, including, without limitation, any royalty payments, license fee payments, milestone payments and payments for any equity or debt purchases by a sublicensee, within 30 days of the receipt of any such amounts or payments by Eleison. Eleison will bear all costs associated with development, commercialization and patent prosecution, and will control product development and commercialization. In addition, Eleison will be responsible for all royalty and milestone payments due under the Baxter license and MediBIC

development agreement discussed below. The agreement contemplates that Eleison, to satisfy its diligence obligations, will raise sufficient funds to commence clinical development activities with glufosfamide.

In November 2004, we entered into an agreement with MediBIC to develop glufosfamide in Japan and several other Asian countries, and received an upfront payment of $5.0 million contingent upon the finalization of the clinical development plan. In July 2005, we finalized the development plan with MediBIC and began recognizing revenue from the upfront payment on a straight-line basis over the development period, through December 31, 2008. We were responsible for all development activities under this agreement. We will also be required to make royalty payments upon product commercialization. We may terminate the agreement at any time by making certain payments ranging from $7.0 million to $15.0 million, depending on the stage of development of the glufosfamide product in Japan. In 2009, we had no further responsibilities for development activities under this agreement and in May 2009, we dissolved the Joint Development Committee ("JDC") comprising MediBIC and us. No payments were made by either party as a result of the dissolution of the JDC.

In August 2003, we entered into an agreement with Baxter for the licensing and development of glufosfamide. Under this agreement, we paid Baxter an upfront license fee of $0.1 million and a $0.1 million development milestone in 2003. We also made a development milestone payment of $1.3 million in November 2004 and we are obligated to make certain additional development milestone payments, with the next payment due in connection with the filing of a new drug application with the FDA for glufosfamide. We will be required to make a milestone payment of $1.0 million within 30 days of filing an NDA for glufosfamide with the FDA. Future milestone payments in connection with the development of glufosfamide and United States and foreign regulatory submissions could total up to $8.0 million, and sales-based milestone payments could total up to $17.5 million. Following regulatory approval, we will be obligated to pay up to mid-single digit royalties to Baxter based on sales of glufosfamide products. We cannot be certain when, if ever, we will have to make development or sales-based milestone or royalty payments to Baxter.

Off-Balance Sheet Arrangements

As of December 31, 2010, 2009 and 2008, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. Therefore, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

Income Taxes

We incurred net operating losses for the years ended December 31, 2010, 2009 and 2008 and, accordingly, we did not pay any federal or state income taxes. As of December 31, 2010, we had accumulated approximately $65 million in both federal and state net operating loss carryforwards to reduce future taxable income. If not utilized, our federal and state net operating loss carryforwards begin to expire in 2022 and 2014 for federal and state tax purposes, respectively. Our net operating loss carryforwards are subject to certain limitations on annual utilization in case of changes in ownership, as defined by federal and state tax laws.

At December 31, 2010, we had research credit carryforwards of approximately $0.9 million and $3.2 million for federal California state income tax purposes, respectively. If not utilized the federal carryforward will expire in 2030. During the year ended December 31, 2009, the Company wrote down its deferred tax assets related to net operating loss carryforwards and tax credits that are expected to expire before utilization due to the annual limitation.

We have not recorded a benefit from our net operating loss or research credit carryforwards because we believe that it is uncertain that we will have sufficient income from future operations to realize the carryforwards prior to their expiration. Accordingly, we have established a valuation allowance against the deferred tax asset arising from the carryforwards.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and related disclosures. We review our estimates on an ongoing basis. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. While our significant accounting policies are described in more detail in the notes to our consolidated financial statements included in this Annual Report on Form 10-K, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Stock-Based Compensation

We account for stock options and stock purchase rights related to our equity incentive plans under the provisions of ASC 718 which requires the recognition of the fair value of stock-based compensation. The fair value of stock options and ESPP shares was estimated using a Black-Scholes option valuation model. This model requires the input of subjective assumptions in implementing ASC 718 including expected stock price volatility, expected life and estimated forfeitures of each award. The fair value of equity-based awards is amortized over the vesting period of the award, and we have elected to use the straight-line method of amortization. Due to the limited amount of historical data available to us, particularly with respect to stock-price volatility, employee exercise patterns and forfeitures, actual results could differ from our assumptions.

We account for equity instruments issued to non-employees in accordance with the provisions of ASC 718 and ASC 505,*"Equity."* As a result, the non-cash charge to operations for non-employee options with vesting or other performance criteria is affected each reporting period by changes in the estimated fair value of our common stock, as the underlying equity instruments vest. The two factors which most affect these changes are the price of the common stock underlying stock options for which stock-based compensation is recorded and the volatility of the stock price. If our estimates of the fair value of these equity instruments change, it would have the effect of changing compensation expenses.

Preclinical and Clinical Trial Accruals

Most of our preclinical and clinical trials are performed by third party contract research organizations, or CROs, and clinical supplies are manufactured by contract manufacturing organizations, or CMOs. Invoicing from these third parties may be monthly based upon services performed or based upon milestones achieved. We accrue these expenses based upon our assessment of the status of each clinical trial and the work completed, and upon information obtained from the CROs and CMOs. Our estimates are dependent upon the timeliness and accuracy of data provided by the CROs and CMOs regarding the status and cost of the studies, and may not match the actual services performed by the organizations. This could result in adjustments to our research and development expenses in future periods. To date we have had no significant adjustments.

Marketable Securities

We classify all of our marketable securities as available-for-sale. We carry these investments at fair value, based upon the levels of inputs described below, and unrealized gains and losses are included in accumulated other comprehensive income which is reflected as a separate component of stockholders' equity. The amortized cost of securities in this category is adjusted for amortization of premiums and accretions of discounts to maturity. Such amortization is included in interest income. Realized gains and losses are recorded in our statement of operations. If we believe that an other-than-temporary decline exists, it is our policy to record a write-down to reduce the investments to fair value and record the related charge as a reduction of interest income.

We adopted ASC 820, *"Fair Value and Measurements,* in the first quarter of 2008. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Our short-term investments primarily utilize broker quotes in a non-active market for valuation of these securities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

ASC 820 requires us to maximize the use of observable inputs and minimize the use of unobservable inputs. If a financial instrument uses inputs that fall in different levels of the hierarchy, the instrument will be categorized based upon the lowest level of input that is significant to the fair value calculation. Our financial assets measured at fair value on a recurring basis include securities available for sale. Securities available for sale include money market funds, government securities, commercial paper and corporate bonds.

Fair Value of Warrants

Prior to January 1, 2009, common stock warrants were recorded in stockholders equity in accordance with ASC 815,*"Derivatives and Hedging"* and ASC 825, *"Financial instruments."* However in June 2008, the Financial Accounting Standards Board ("FASB") issued new guidance now codified in ASC 815 that clarifies the determination of whether an instrument (or an embedded feature) is indexed to an entity's own stock, which would qualify for classification as a liability. The new guidance was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of the new guidance on January 1, 2009, resulted in the reclassification of our outstanding warrants from stockholders' equity to liability and a cumulative effect of change in accounting principle on our deficit accumulated during development stage of $0.5 million. In addition, the stock warrants are required to be fair valued at each reporting period, with the changes in fair value recognized in our consolidated statement of operations. We fair value the warrants using a Black Scholes valuation model. Since the outstanding common stock warrants are fair valued at the end of each reporting period, any change in the underlying assumptions to the Black Scholes valuation model, including the volatility and price of our common stock, may have a significant impact on our consolidated financial statements.

Accounting for Income Taxes

Our income tax policy records the estimated future tax effects of temporary differences between the tax basis of assets and liabilities and amounts reported in the accompanying balance sheets, as well as operating loss and tax credit carry forwards. We have recorded a full valuation allowance to reduce our deferred tax assets, as based on available objective evidence; it is more likely than not that the deferred tax assets will not be realized. In the event that we were to determine that we would be able to realize our deferred tax assets in the future, an adjustment to the deferred tax assets would result in an income tax benefit in the period such determination is made.

Recent Accounting Pronouncements

In April 2010, the FASB issued Accounting Standards Update ("ASU") No. 2010-17,*Revenue Recognition —Milestone Method*. This ASU provides guidance on the criteria that should be met for determining whether the milestone method of revenue recognition is appropriate. Under the milestone method of revenue recognition,

consideration that is contingent upon achievement of a milestone in its entirety can be recognized as revenue in the period in which the milestone is achieved only if the milestone meets all criteria to be considered substantive. This standard provides the criteria to be met for a milestone to be considered substantive which includes that: a) performance consideration earned by achieving the milestone be commensurate with either performance to achieve the milestone or the enhancement of the value of the item delivered as a result of a specific outcome resulting from performance to achieve the milestone; and b) relate to past performance and be reasonable relative to all deliverables and payment terms in the arrangement. This standard is effective on a prospective basis for milestones in fiscal years and interim periods within those years beginning on or after June 15, 2010, with early adoption permitted, and applies to milestones achieved on or after that time. Adoption of this standard did not have a material impact on our condensed consolidated financial statements.

In January 2010, the FASB issued ASU No. 2010-6,*Fair Value Measurements and Disclosures*, to amend the disclosure requirements related to recurring and nonrecurring fair value measurements. ASU 2010-6 requires new disclosures on the transfers of assets and liabilities between Level 1 (quoted prices in active market for identical assets or liabilities) and Level 2 (significant other observable inputs) of the fair value measurement hierarchy, including the reasons and the timing of the transfers. Additionally, this guidance requires a roll forward of activities on purchases, sales, issuance, and settlements of the assets and liabilities measured using significant unobservable inputs (Level 3 fair value measurements). ASU 2010-6 became effective for us on January 1, 2010, except for the disclosure on the roll forward activities for Level 3 fair value measurements, which will become effective for us on January 1, 2011. Other than requiring additional disclosures, adoption of this new guidance did not have a material impact on our condensed consolidated financial statements.

In October 2009, the FASB issued ASU No. 2009-13, Revenue Recognition (Topic 605):*Multiple Deliverable Revenue Arrangements—A Consensus of the FASB Emerging Issues Task Force."* This update provides application guidance on whether multiple deliverables exist, how the deliverables should be separated and how the consideration should be allocated to one or more units of accounting. This update establishes a selling price hierarchy for determining the selling price of a deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific nor third-party evidence is available. We will be required to apply this guidance prospectively for revenue arrangements entered into or materially modified after January 1, 2011; however, earlier application is permitted. We do not expect that this update will have a material impact on our condensed consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

Interest Rate Risk. Our exposure to market risk for changes in interest rates relates to our cash equivalents on deposit in highly liquid money market funds and investments in short-term marketable securities. The primary objective of our cash investment activities is to preserve principal while at the same time maximizing the income we receive from our invested cash without significantly increasing risk of loss. We invest in high-quality financial instruments, which currently have weighted average maturity of less than one year. We do not use derivative financial instruments in our investment portfolio. Our cash and investments policy emphasizes liquidity and preservation of principal over other portfolio considerations. Our investment portfolio is subject to interest rate risk and will fall in value if market interest rates rise. However, due to the short duration of our investment portfolio we believe an increase in the interest rates of one percentage point would not be material to our financial condition or results of operations.

In addition, we do not have any material exposure to foreign currency rate fluctuations as we operate primarily in the United States. Although we conduct some clinical and safety studies, and manufacture some active pharmaceutical product with vendors outside the United States, most of our transactions are denominated in U.S. dollars.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
Threshold Pharmaceuticals, Inc.
(a development stage enterprise)

In our opinion, the consolidated financial statements listed in the accompanying index appearing under Item 15 present fairly, in all material respects, the financial position of Threshold Pharmaceuticals, Inc. and its subsidiary (the "Company") (a development stage enterprise) at December 31, 2010 and December 31, 2009, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2010 and cumulatively for the period from October 17, 2001 (date of inception) to December 31, 2010 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 8 to the consolidated financial statements, the Company changed the manner in which it accounts for common stock warrants effective January 1, 2009.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 24, 2011

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2010	December 31, 2009
ASSETS		
Current assets:		
Cash and cash equivalents	$ 8,691	$ 8,934
Marketable securities	6,008	28,381
Prepaid expenses and other current assets	473	10,342
Restricted cash	471	—
Total current assets	15,643	47,657
Property and equipment, net	271	505
Restricted cash	—	483
Other assets	290	40
Total assets	$ 16,204	$ 48,685
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 252	$ 284
Accrued clinical and development expenses	2,439	1,618
Accrued liabilities	823	10,972
Total current liabilities	3,514	12,874
Warrant liability	7,499	12,665
Deferred rent	248	489
Total liabilities	11,261	26,028
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, $0.001 par value:		
Authorized: 2,000,000 shares authorized; no shares issued and outstanding.	—	—
Common stock, $0.001 par value:		
Authorized: 150,000,000 and 50,000,000 shares at December 31, 2010 and 2009, respectively; Issued and outstanding: 33,702,242 and 33,563,670 shares at December 31, 2010 and 2009, respectively.	34	33
Additional paid-in capital	231,383	230,441
Accumulated other comprehensive (loss) income	1	(24)
Deficit accumulated during the development stage	(226,475)	(207,793)
Total stockholders' equity	4,943	22,657
Total liabilities and stockholders' equity	$ 16,204	$ 48,685

The accompanying notes are an integral part of these consolidated financial statements.

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Years Ended December 31,			Cumulative Period from October 17, 2001 (date of inception) to December 31, 2010
	2010	2009	2008	
Revenue	$ —	$ —	$ 1,440	$ 5,027
Operating expenses:				
Research and development	18,937	15,844	13,440	178,647
General and administrative	4,971	5,480	6,734	63,497
Total operating expenses	23,908	21,324	20,174	242,144
Loss from operations	(23,908)	(21,324)	(18,734)	(237,117)
Interest income (expense), net	60	(13)	442	8,319
Other income (expense), net	5,166	(2,311)	—	2,855
Net loss	(18,682)	(23,648)	(18,292)	(225,943)
Dividend related to beneficial conversion feature of redeemable convertible preferred stock	—	—	—	(40,862)
Net loss attributable to common stockholders	$(18,682)	$(23,648)	$(18,292)	$ (266,805)
Net loss per common share:				
Basic and diluted	$ (0.56)	$ (1.21)	$ (1.97)	
Weighted average number of shares used in net loss per common share calculations:				
Basic and diluted	33,654	19,594	9,275	

The accompanying notes are an integral part of these consolidated financial statements.

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
FOR THE PERIOD
FROM OCTOBER 17, 2001 (DATE OF INCEPTION) TO DECEMBER 31, 2010
(in thousands, except share and per share data)

	Common Stock		Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount					
Issuance of restricted common stock to a founder and member of the Board of Directors in October 2001 for cash at $0.12 per share	25,300	$ —	$ 2	$ —	$ —	$ —	$ 2
Net loss	—	—	—	—	—	(236)	(236)
Balances, December 31, 2001	25,300	—	2	—	—	(236)	(234)
Issuance of restricted common stock to a member of the Board of Directors for cash at $0.96 per share in January 2002	3,795	—	4	—	—	—	4
Issuance of common stock pursuant to exercise of stock options for cash at $0.96 per share	405	—	—	—	—	—	—
Deferred stock-based compensation	—	—	25	(25)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	1	—	—	1
Non-employee stock-based compensation	—	—	21	—	—	—	21
Components of other comprehensive income (loss):							
Unrealized loss on marketable securities	—	—	—	—	(1)	—	(1)
Net loss	—	—	—	—	—	(2,458)	(2,458)
Comprehensive loss							(2,459)
Balances, December 31, 2002	29,500	—	52	(24)	(1)	(2,694)	(2,667)
Issuance of common stock pursuant to exercise of stock options for cash at $0.96 per share	1,285	—	1	—	—	—	1
Issuance of a warrant to purchase Series A redeemable convertible preferred stock	—	—	44	—	—	—	44
Beneficial conversion feature related to issuance of Series B redeemable convertible preferred stock	—	—	40,862	—	—	—	40,862
Deemed dividend related to beneficial conversion feature of Series B redeemable convertible preferred stock	—	—	(40,862)	—	—	—	(40,862)
Deferred stock-based compensation, net of cancellations	—	—	2,332	(2,332)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	810	—	—	810
Non-employee stock-based compensation	—	—	256	—	—	—	256
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	164	—	164
Net loss	—	—	—	—	—	(8,303)	(8,303)
Comprehensive loss							(8,139)
Balances, December 31, 2003	30,785	—	2,685	(1,546)	163	(10,997)	(9,695)
Issuance of common stock pursuant to exercise of stock options for cash	586,385	—	878	—	—	—	878
Deferred stock-based compensation, net of cancellations	—	—	20,385	(20,385)	—	—	—
Amortization of deferred stock-based compensation	—	—	—	5,294	—	—	5,294
Non-employee stock-based compensation	—	—	681	—	—	—	681
Repurchase of unvested common stock	(2,073)	—	(6)	—	—	—	(6)

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)—(Continued)
FOR THE PERIOD
FROM OCTOBER 17, 2001 (DATE OF INCEPTION) TO DECEMBER 31, 2010
(in thousands, except share and per share data)

	Common Stock						
	Shares	Amount	Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	(59)	—	(59)
Net loss	—	—	—	—	—	(23,566)	(23,566)
Comprehensive loss							(23,625)
Balances, December 31, 2004	615,097	—	24,623	(16,637)	104	(34,563)	(26,473)
Issuance of common stock in an initial public offering for cash of $42.00, per share, net of issuance costs of $4.6 million	1,018,768	1	38,134	—	—	—	38,135
Issuance of common stock for cash of $62.76 per share, net of issuance costs of $4.5 million	1,066,537	1	62,394	—	—	—	62,395
Issuance of common stock pursuant to exercise of warrants	3,211	—	—	—	—	—	—
Conversion of convertible preferred stock upon initial public offering	3,425,468	4	49,835	—	—	—	49,839
Issuance of common stock pursuant to stock plans	84,772	—	557	—	—	—	557
Deferred stock-based compensation, net of cancellations	—	—	3,321	(3,321)	—	—	—
Reversal of deferred stock-based compensation related to employee terminations	—	—	(2,862)	2,862	—	—	—
Amortization of deferred stock-based compensation	—	—	(416)	5,740	—	—	5,324
Non-employee stock-based compensation	—	—	4,097	—	—	—	4,097
Repurchase of unvested common stock	(8,591)	—	(18)	—	—	—	(18)
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	(80)	—	(80)
Net loss	—	—	—	—	—	(44,408)	(44,408)
Comprehensive loss							(44,488)
Balances, December 31, 2005	6,205,262	6	179,665	(11,356)	24	(78,971)	89,368
Issuance of common stock pursuant to stock plans	46,144	—	518	—	—	—	518
Reversal of deferred stock-based compensation related to employee terminations	—	—	(2,970)	2,970	—	—	—
Amortization of deferred stock-based compensation	—	—	—	4,411	—	—	4,411
Stock-based compensation	—	—	5,738	—	—	—	5,738
Repurchase of unvested common stock	(27,091)	—	(80)	—	—	—	(80)
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	(31)	—	(31)
Net loss	—	—	—	—	—	(55,686)	(55,686)
Comprehensive loss							(55,717)
Balances, December 31, 2006	6,224,315	$ 6	$ 182,871	$ (3,975)	$ (7)	$ (134,657)	$ 44,238
Issuance of common stock pursuant to stock plans	20,151	—	128	—	—	—	128
Reversal of deferred stock-based compensation related to employee terminations	—	—	(304)	304	—	—	—

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)—(Continued)
FOR THE PERIOD
FROM OCTOBER 17, 2001 (DATE OF INCEPTION) TO DECEMBER 31, 2010
(in thousands, except share and per share data)

	Common Stock						
	Shares	Amount	Additional Paid-In Capital	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Total Stockholders' Equity (Deficit)
Amortization of deferred stock-based compensation	—	—	—	2,837	—	—	2,837
Stock-based compensation	—	—	3,072	—	—	—	3,072
Repurchase of unvested common stock	(16,410)	—	(34)	—	—	—	(34)
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	10	—	10
Net loss	—	—	—	—	—	(30,664)	(30,664)
Comprehensive loss							(30,654)
Balances, December 31, 2007	6,228,056	6	185,733	(834)	3	(165,321)	19,587
Issuance of common stock and warrants to certain investors, net of issuance costs of $1.5 million	8,970,574	9	16,812	—	—	—	16,821
Issuance of common stock pursuant to stock plans	15,461	—	30	—	—	—	30
Amortization of deferred stock-based compensation	—	—	—	828	—	—	828
Stock-based compensation	—	—	2,424	—	—	—	2,424
Repurchase of unvested common stock	(47)	—	—	—	—	—	—
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	16	—	16
Net loss	—	—	—	—	—	(18,292)	(18,292)
Comprehensive loss							(18,276)
Balances, December 31, 2008	15,214,044	15	204,999	(6)	19	(183,613)	21,414
Issuance of common stock to certain investors, net of issuance costs of $1.9 million	18,324,599	18	23,210	—	—	—	23,228
Issuance of common stock pursuant to stock plans	25,027	—	27	—	—	—	27
Amortization of deferred stock-based compensation	—	—	—	6	—	—	6
Stock-based compensation	—	—	2,205	—	—	—	2,205
Cumulative effect of change in accounting principle	—	—	—	—	—	(532)	(532)
Components of other comprehensive income (loss):							
Change in unrealized gain (loss) on marketable securities	—	—	—	—	(43)	—	(43)
Net loss	—	—	—	—	—	(23,648)	(23,648)
Comprehensive loss							(23,691)
Balances, December 31, 2009	33,563,670	$ 33	$ 230,441	$ —	$ (24)	$ (207,793)	$ 22,657
Issuance of common stock pursuant to stock plans	138,572	1	139	—	—	—	140
Stock-based compensation	—	—	803	—	—	—	803
Components of other comprehensive income (loss):							
Change in unrealized gain on marketable securities	—	—	—	—	25	—	25
Net loss	—	—	—	—	—	(18,682)	(18,682)
Comprehensive loss							(18,657)
Balances, December 31, 2010	33,702,242	$ 34	$ 231,383	$ —	$ 1	$ (226,475)	$ 4,943

The accompanying notes are an integral part of these consolidated financial statements.

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,			Cumulative Period from October 17, 2001 (date of inception) to December 31, 2010
	2010	2009	2008	
Cash flows from operating activities:				
Net loss	$(18,682)	$(23,648)	$(18,292)	$ (225,943)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	509	597	935	4,836
Stock-based compensation expense	803	2,211	3,252	38,808
Change in common stock warrant value	(5,166)	2,311	—	(2,855)
Amortization of debt issuance costs	—	—	—	44
(Gain) loss on sale of investments, property and equipment	—	—	—	(27)
Changes in operating assets and liabilities:				
Prepaid expenses and other current assets	(247)	161	(2)	(629)
Accounts payable	(32)	(556)	(182)	252
Accrued clinical and development expenses	821	1,074	(696)	2,439
Accrued liabilities	(149)	130	125	823
Deferred rent	(241)	(65)	(11)	248
Deferred revenue	—	—	(1,437)	—
Net cash used in operating activities	(22,384)	(17,785)	(16,308)	(182,004)
Cash flows from investing activities:				
Acquisition of property and equipment	(108)	(22)	(30)	(5,096)
Acquisition of marketable securities	(15,223)	(34,961)	(9,242)	(195,793)
Proceeds from sales and maturities of marketable securities	37,454	13,496	13,700	189,802
Restricted cash	12	—	—	(471)
Net cash provided by (used in) investing activities	22,135	(21,487)	4,428	(11,558)
Cash flows from financing activities:				
Proceeds from redeemable convertible preferred stock, net	—	—	—	49,839
Proceeds from issuance of common stock and warrants, net of offering expenses	140	33,077	16,851	152,548
Deferred offering costs	(134)	—	—	(134)
Proceeds from issuance of notes payable	—	—	—	3,616
Repayment of notes payable	—	(337)	(909)	(3,616)
Net cash provided by (used in) financing activities	6	32,740	15,942	202,253
Net increase (decrease) in cash and cash equivalents	(243)	(6,532)	4,062	8,691
Cash and cash equivalents, beginning of period	8,934	15,466	11,404	—
Cash and cash equivalents, end of period	$ 8,691	$ 8,934	$ 15,466	$ 8,691
Supplemental disclosures:				
Cash paid for interest	$ —	$ 110	$ 61	$ 560
Non-cash investing and financing activities:				
Cumulative change in accounting principle	$ —	$ 532	$ —	$ 532
Deferred stock-based compensation	$ —	$ —	$ —	$ 19,511
Conversion of redeemable convertible preferred stock	$ —	$ —	$ —	$ 49,839
Change in unrealized gain (loss) in marketable securities	$ 25	$ (43)	$ 16	$ 1
Fair value of redeemable convertible preferred stock warrant	$ —	$ —	$ —	$ 44
Dividend related to beneficial conversion feature of redeemable convertible preferred stock	$ —	$ —	$ —	$ 40,862

The accompanying notes are an integral part of these consolidated financial statements.

THRESHOLD PHARMACEUTICALS, INC.
(A DEVELOPMENT STAGE ENTERPRISE)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Description of Operations and Basis of Presentation

Threshold Pharmaceuticals, Inc. (the "Company") was incorporated in the State of Delaware on October 17, 2001. The Company is a biotechnology company focused on the discovery and development of drugs targeting the microenvironment of solid tumors.

In June 2005, the Company formed a wholly-owned subsidiary, THLD Enterprises (UK), Limited in the United Kingdom in connection with conducting clinical trials in Europe. As of December 31, 2010, there has been no financial activity related to this entity.

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America and include the accounts of the Company and its wholly owned subsidiary, and reflect the elimination of intercompany accounts and transactions.

Liquidity

The Company has product candidates in various stages of development as well as discovery and, since inception, has devoted substantially all of its time and efforts to performing research and development, raising capital and recruiting personnel. The Company has incurred significant losses since its inception. At December 31, 2010, the Company had an accumulated deficit of $226.5 million. The Company continues to incur substantial losses and cash outflows from operations since December 31, 2010 and management believes that it will continue to do so for the foreseeable future. In February and March 2011, the Company sold an aggregate of 717,132 shares of common stock under the Company's At Market Issuance Sales Agreement for net proceeds of $1.8 million. On March 16, 2011, the Company sold to certain investors an aggregate of 14,313,081 shares of its common stock for a purchase price equal to $2.05 per share and, for a purchase price equal $0.05 per share, warrants exercisable for a total of 5,725,227 shares of its common stock for aggregate gross proceeds equal to $30.1 million. Net proceeds generated from the offering were approximately $27.8 million, which includes underwriter discounts and estimated offering costs.

The Company expects to need to raise additional capital or incur indebtedness to continue to fund its future operations. The Company may seek to raise capital through a variety of sources, including:

- the public equity market;
- private equity financing;
- collaborative arrangements; and/or
- public or private debt.

The Company's ability to raise additional funds will depend on its clinical and regulatory events, its ability to identify promising in-licensing opportunities, and factors related to financial, economic, and market conditions, many of which are beyond its control. The Company cannot be certain that sufficient funds will be available when required or on satisfactory terms. If adequate funds are not available, the Company may be required to significantly reduce or refocus its operations or to obtain funds through arrangements that may require the Company to relinquish rights to certain of its products, technologies or potential markets, any of which could delay or require that the Company curtail its development programs or otherwise have a material adverse effect on its business, financial condition and results of operations. In addition, the Company may have to delay, reduce the scope or eliminate some of its research and development, which could delay the time to market for any of its product candidates, if such adequate funds are not available. To the extent that additional

capital is raised through the sale of equity or convertible debt securities, the issuance of such securities would result in ownership dilution to existing stockholders. There are no assurances that the Company will be able to raise additional financing for the amounts required to execute the Company's business plans and on the terms acceptable to the Company.

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain amounts in prior fiscal years have been reclassified to conform to the presentation adopted in the current fiscal year.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original maturities of three months or less on the date of purchase, to be cash equivalents. All cash and cash equivalents are held in the United States of America in financial institutions or money market funds, which are unrestricted as to withdrawal or use.

Restricted Cash

Restricted cash represents one certificate of deposit held at a financial institution that serves as collateral for the Company's facility lease agreement.

Marketable Securities

The Company classifies its marketable securities as "available-for-sale." Such marketable securities are recorded at fair value and unrealized gains and losses are recorded as a separate component of stockholders' equity (deficit) until realized. Realized gains and losses on sale of all such securities are reported in net loss, computed using the specific identification cost method. The Company places its marketable securities primarily in U.S. government securities, money market funds, corporate bonds, commercial paper and certificates of deposit.

Fair Value of Financial Instruments

The carrying amounts of certain of the Company's financial instruments, including cash and cash equivalents, accounts payable and accrued liabilities approximate fair value due to their relatively short maturities. Estimated fair values for marketable securities, which are separately disclosed in Note 3, are based on market prices for the same or similar instruments. The carrying amount of the common stock warrant liability represents its estimated fair value.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments which potentially subject the Company to concentrations of risk consist principally of cash, cash equivalents and marketable securities. The Company invests in a variety of financial instruments, such as, but not limited to, certificates of deposit, corporate and municipal bonds, United States Treasury and agency securities. The Company is exposed to credit risk in the event of default by the financial institutions for amounts in excess of Federal Deposit Insurance Corporation insured limits. The Company performs periodic evaluations

of the relative credit standings of these financial institutions, and by policy, limits the amount of credit exposure with any one financial institution or commercial issuer.

Any products developed by the Company will require approval from the U.S. Food and Drug Administration ("FDA") or foreign regulatory agencies prior to commercial sales. There can be no assurance that the Company's products will receive the necessary approvals. If the Company is denied such approvals or such approvals are delayed, it could have a material adverse effect on the Company.

The Company has one drug candidate in development, which has not received regulatory approval. To achieve profitable operations, the Company must successfully develop, test, manufacture and market its products. There can be no assurance that any such products can be developed successfully or manufactured at an acceptable cost and with appropriate performance characteristics, or that such products will be successfully marketed. These factors could have a material adverse effect on the Company's future financial results.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets, generally three years. Leasehold improvements are amortized using the straight-line method over the estimated useful life of the improvement, or the lease term, if shorter. Accordingly, leasehold improvements are being amortized over lease terms of approximately 4-5 years. Maintenance and repairs are charged to operations as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is reflected in operations.

Impairment of Long-lived assets

In accordance with the provisions of Accounting Standards Codification ("ASC") 360, *"Property, Plant and Equipment,"* the Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. Impairment, if any, is measured as the amount by which the carrying amount of a long-lived asset exceeds its fair value. The Company considers various valuation factors, principally discounted cash flows, to assess the fair values of long-lived assets. As of December 31, 2010, the Company has not incurred any such impairment losses.

Related Parties

The Company's offering of common stock and warrants, on March 16, 2011, included 952,380 shares of common stock and warrants exercisable for a total of 380,952 shares of common stock sold to entities affiliated with Sutter Hill Ventures ("Sutter Hill"). Jeffrey W. Bird, member of the Company's board of directors, is a managing member of Sutter Hill. Also as part of this offering, certain members of the Company's management team purchased 340,472 shares and received warrants to purchase 136,186 shares of common stock.

The Company's offering of common stock and warrants, on October 5, 2009, included 1,570,980 shares of common stock and warrants exercisable for a total of 628,264 shares of common stock sold to entities affiliated with Sutter Hill, and 1,047,120 shares of common stock and warrants exercisable for a total of 418,847 shares of common stock sold to entities affiliated with Three Arch Management III, L.L.C. ("Three Arch"). Jeffrey W. Bird and Wilfred E. Jager, members of the Company's board of directors, are managing members of Sutter Hill and Three Arch, respectively. Also as part of this offering, certain members of the Company's management team purchased 248,690 shares and received warrants to purchase 99,475 shares of common stock.

The Company's offering of common stock and warrants, on August 29, 2008, included 980,391 shares of common stock and warrants exercisable for a total of 392,156 shares of common stock sold to entities affiliated

with Three Arch. In addition included in the offering were 2,941,173 shares of common stock and warrants exercisable for a total of 1,176, 464 shares of common stock sold to entities affiliated with Sutter Hill. Also as part of this offering, certain members of the Company's management team purchased 245,095 shares and received warrants to purchase 98,038 shares of common stock.

In March 2008, the Company entered into a License Agreement, for the use of 5,500 square feet of its facilities and laboratory space with Ethos Pharmaceuticals (formerly AllChemie, Inc.), a Delaware corporation. Dr. Harold E. Selick, the Company's Chief Executive Officer and a member of the board of directors, is the chairman of the board of directors of Ethos Pharmaceuticals. Ethos Pharmaceuticals paid the Company a fee in the aggregate of $192,570 for the one-year initial term of the License Agreement. In addition, Ethos Pharmaceuticals paid for costs incurred relating to agreed upon services provided by the Company. In January 2009, the License Agreement was terminated at end of the initial term.

Comprehensive Income (loss)

Comprehensive income (loss) generally represents all changes in stockholders' equity (deficit) except those resulting from investments or contributions by stockholders. The Company's net loss and unrealized gain (loss) on available-for-sale marketable securities represent the only components of other comprehensive loss.

Revenue Recognition

The Company recognizes revenue in accordance with the provisions of ASC 605, *"Revenue Recognition"*. In connection with the Company's agreement with MediBIC Co. Ltd. ("MediBIC"), the Company recognizes revenue from the non-refundable, upfront payment ratably over the term of its performance under the agreement. The upfront payment received, pending recognition as revenue, is recorded as deferred revenue and classified as a short-term or long-term liability on the consolidated balance sheet to be recognized over the period of deferral. Revenue was fully recognized on a straight-line basis through 2008, the development period. In 2009, the Company had no responsibilities for development activities and in May 2009, the Company dissolved the Joint Development Committee ("JDC") comprising MediBIC and the Company.

Research and Development expenses

Research and development expenses are charged to research and development expense as incurred. Research and development expenses consist of salaries and benefits, laboratory supplies, consulting fees and fees paid to third party contract research and manufacturing organizations.

Preclinical and Clinical Trial Accruals

The Company's preclinical and clinical trials are performed by third party contract research organizations (CROs) and/or clinical investigators, and clinical supplies are manufactured by contract manufacturing organizations (CMOs). Invoicing from these third parties may be monthly based upon services performed or based upon milestones achieved. The Company accrues these expenses based upon its assessment of the status of each clinical trial and the work completed, and upon information obtained from the CROs and CMOs. The Company's estimates are dependent upon the timeliness and accuracy of data provided by the CROs and CMOs regarding the status and cost of the studies, and may not match the actual services performed by the organizations. This could result in adjustments to the Company's research and development expenses in future periods. To date the Company has had no significant adjustments.

Income Taxes

The Company accounts for income taxes under the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Segments

The Company has one reportable segment and uses one measurement of profitability to manage its business. All long-lived assets are maintained in the United States of America.

Stock-Based compensation

The Company accounts for stock-based compensation in accordance with ASC 718, *"Compensation—Stock Compensation,"* which requires measurement of all employee stock-based compensation awards using a fair-value method and recording of such expense in the consolidated financial statements over the requisite service period. See Note 9 "Equity Incentive Plans and Stock Based Compensation" for further discussion.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of ASC 718 and ASC 505,*"Equity,"* which require that such equity instruments are recorded at their fair value on the measurement date. The measurement of stock-based compensation is subject to periodic adjustment as the underlying equity instruments vest.

Recent Accounting Pronouncements

In April 2010, the FASB issued Accounting Standards Update ("ASU") No. 2010-17,*Revenue Recognition—Milestone Method*. This ASU provides guidance on the criteria that should be met for determining whether the milestone method of revenue recognition is appropriate. Under the milestone method of revenue recognition, consideration that is contingent upon achievement of a milestone in its entirety can be recognized as revenue in the period in which the milestone is achieved only if the milestone meets all criteria to be considered substantive. This standard provides the criteria to be met for a milestone to be considered substantive which includes that: a) performance consideration earned by achieving the milestone be commensurate with either performance to achieve the milestone or the enhancement of the value of the item delivered as a result of a specific outcome resulting from performance to achieve the milestone; and b) relate to past performance and be reasonable relative to all deliverables and payment terms in the arrangement. This standard is effective on a prospective basis for milestones in fiscal years and interim periods within those years beginning on or after June 15, 2010, with early adoption permitted, and applies to milestones achieved on or after that time. Adoption of this standard did not have a material impact on the Company's condensed consolidated financial statements.

In January 2010, the FASB issued ASU No. 2010-6,*Fair Value Measurements and Disclosures*, to amend the disclosure requirements related to recurring and nonrecurring fair value measurements. ASU 2010-6 requires new disclosures on the transfers of assets and liabilities between Level 1 (quoted prices in active market for identical assets or liabilities) and Level 2 (significant other observable inputs) of the fair value measurement hierarchy, including the reasons and the timing of the transfers. Additionally, this guidance requires a roll forward of activities on purchases, sales, issuance, and settlements of the assets and liabilities measured using significant unobservable inputs (Level 3 fair value measurements). ASU 2010-6 became effective for the Company on January 1, 2010, except for the disclosure on the roll forward activities for Level 3 fair value measurements, which will become effective for the Company on January 1, 2011. Other than requiring additional disclosures, adoption of this new guidance did not have a material impact on the Company's condensed consolidated financial statements.

In October 2009, the FASB issued ASU No. 2009-13, Revenue Recognition (Topic 605):*Multiple Deliverable Revenue Arrangements—A Consensus of the FASB Emerging Issues Task Force."* This update provides application guidance on whether multiple deliverables exist, how the deliverables should be separated and how the consideration should be allocated to one or more units of accounting. This update establishes a selling price hierarchy for determining the selling price of a deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific nor third-party evidence is available. The Company will be required to apply this guidance prospectively for revenue arrangements entered into or materially modified after January 1, 2011; however, earlier application is permitted. The Company does not expect that this update will have a material impact on its condensed consolidated financial statements.

NOTE 2—NET LOSS PER COMMON SHARE

Basic net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted average number of vested common shares outstanding during the period. Diluted net loss per common share is computed by giving effect to all potential dilutive common shares, including outstanding options, common stock subject to repurchase and warrants. A reconciliation of the numerator and denominator used in the calculation of basic and diluted net loss per common share follows (in thousands):

	Years Ended December 31,		
	2010	2009	2008
Numerator:			
Net loss attributable to common stockholders	$(18,682)	$(23,648)	$(18,292)
Denominator:			
Weighted-average number of common shares outstanding	33,654	19,594	9,285
Less: Weighted-average shares subject to repurchase	—	—	(10)
Weighted-average number of common shares outstanding used in computing basic and diluted net loss per common share	(33,654)	19,594	9,275
Basic and diluted net loss per common share	$ (0.56)	$ (1.21)	$ (1.97)

The following warrants, outstanding options, common stock subject to repurchase and purchase rights under the Company's ESPP were excluded from the computation of diluted net loss per common share for the periods presented because including them would have had an antidilutive effect (in thousands):

	December 31,		
	2010	2009	2008
Warrants to purchase common stock	10,918	10,918	3,588
Options to purchase common stock	2,746	936	617
Common stock subject to repurchase	—	—	—
Shares issuable related to the ESPP	61	50	8

NOTE 3—FAIR VALUE MEASUREMENTS AND MARKETABLE SECURITIES

The Company accounts for its marketable securities in accordance with ASC 820*"Fair Value Measurements and Disclosures."* ASC 820 defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosures about fair value measurements. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The Company's short-term investments primarily utilize broker quotes in a non-active market for valuation of these securities.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company utilizes the market approach to measure fair value for its financial assets. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets. The following table sets forth the Company's financial assets (cash equivalents and marketable securities) at fair value on a recurring basis as of December 31, 2010:

(in thousands)	Fair Value as of December 31, 2010	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Money market funds	$ 4,627	$ 4,627	$ —	$ —
Certificates of deposit	245	—	245	—
Corporate bonds	1,663	—	1,663	—
Government securities	3,202	—	3,202	—
Commercial paper	4,865	—	4,865	—
Total cash equivalents and marketable securities	$ 14,602	$ 4,627	$ 9,975	$ —

The Company invests in highly-liquid, investment-grade securities. The following is a summary of the Company's available-for-sale securities at December 31, 2010 and 2009:

As of December 31, 2010 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	$ 4,627	$ —	$ —	$ 4,627
Certificates of deposit	245	—	—	245
Corporate bonds	1,662	1	—	1,663
Government securities	3,202	—	—	3,202
Commercial paper	4,865	—	—	4,865
	14,601	1	—	14,602
Less cash equivalents	(8,594)	—	—	(8,594)
Total marketable securities	$ 6,007	$ 1	$ —	$ 6,008

As of December 31, 2009 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	$ 7,759	$ —	$ —	$ 7,759
Certificates of deposit	12,528	—	(14)	12,514
Corporate bonds	1,281	1	(2)	1,280
Government securities	9,401	—	(9)	9,392
Commercial paper	6,195	—	—	6,195
	37,164	1	(25)	37,140
Less cash equivalents	(8,759)	—	—	(8,759)
Total marketable securities	$28,405	$ 1	$ (25)	$28,381

There were no realized gains or losses in 2010 and 2009.

As of December 31, 2010, weighted average days to maturity for the Company's available for sale securities was 45 days, with the longest maturity being June 2011.

As of December 31, 2010, there were no marketable securities with unrealized losses.

The Company determined the fair value of the liability associated with its warrants to purchase 10.9 million shares of outstanding common stock using a Black-Scholes Model. See detailed discussion in Note 8— Stockholders' Equity.

NOTE 4—PROPERTY AND EQUIPMENT

Property and equipment comprise the following (in thousands):

	December 31,	
	2010	2009
Computer and office equipment	$ 875	$ 866
Laboratory equipment	1,368	1,276
Leasehold improvements	2,802	2,795
	5,045	4,937
Less: Accumulated depreciation and amortization	(4,774)	(4,432)
Total property and equipment, net	$ 271	$ 505

Depreciation and amortization expense was $0.3 million, $0.7 million, $1.0 million and $4.8 million for the years ended December 31, 2010, 2009 and 2008, and, cumulatively, for the period from October 17, 2001 (date of inception) to December 31, 2010, respectively.

NOTE 5—BALANCE SHEET COMPONENTS

Prepaid expenses and other current assets comprise the following (in thousands):

	December 31,	
	2010	2009
Litigation settlement receivable	$—	$10,000
Other prepaid expenses and current assets	473	342
Total prepaid expenses and other current assets	$473	$10,342

Accrued liabilities comprise the following (in thousands):

	December 31,	
	2010	2009
Payroll and employee related expenses	$528	$ 756
Professional services	116	101
Litigation settlement	—	10,000
Other accrued expenses	179	115
Total accrued liabilities	$823	$10,972

NOTE 6—NOTES PAYABLE

On March 27, 2003, the Company entered into a loan and security agreement with Silicon Valley Bank to borrow up to $1.0 million for working capital and equipment purchases. The Company borrowed the full amount under this facility as of December 2004 and as of December 31, 2007, all borrowings under this facility were paid in full. In April 2006, the Company amended the existing loan and security agreement to borrow up to an additional $4.0 million for working capital and equipment purchases. The interest rate for borrowings under this facility was determined based on the 36-month U.S. Treasury note plus 2.25% on the date of borrowing. The Company borrowed $2.6 million under this facility, which was repaid over a 36-month period from the date of borrowing. The interest rate on these borrowings was approximately 7.2% per annum. At June 30, 2009, all borrowings under this facility were paid in full.

NOTE 7—COMMITMENTS AND CONTINGENCIES

The Company leases certain of its facilities under noncancelable leases, which qualify for operating lease accounting treatment under ASC 840,*"Leases,"* and, as such, these facilities are not included on its unaudited condensed consolidated balance sheets. In August 2004, we entered into a noncancelable facilities sublease agreement for 33,700 square feet of laboratory and office space that originally expired on February 28, 2010 for our headquarters in Redwood City, California. In February 2006, the Company entered into a new lease for an additional 34,205 square feet of office space and extended the lease term for the existing space located at the Company's headquarters in Redwood City, California to September 30, 2011. The lease is for a period of 66 months, beginning on April 1, 2006 with respect to the additional square footage and began on March 1, 2010 with respect to the existing square footage. The lease will expire, unless otherwise terminated under the terms of the lease, on September 30, 2011. The aggregate rent for the term of the lease is approximately $4.8 million. In addition, the lease requires the Company to pay certain taxes, assessments, fees and other costs and expenses associated with the premises in amounts yet to be determined as well as a customary management fee. The Company will also be responsible for the costs of certain tenant improvements associated with the leased space. In connection with the lease, the Company furnished a letter of credit to the landlord for approximately $0.5 million.

On April 1, 2005 the Company entered into a noncancelable lease agreement that originally expired on February 28, 2010 for approximately 6,489 square feet of laboratory space, in Redwood City, California. In connection with the execution of the lease, the Company paid a security deposit of approximately $25,000. On November 17, 2009 the Company extended the term of the lease agreement term to expire in August 2012. The aggregate rent for the extended term of the lease is approximately $0.4 million.

The future rental payments required by the Company for all of its facilities under noncancelable operating leases are as follows (in thousands):

Years Ending December 31,	
2011	1,284
2012	106
Future minimum rental payments	$1,390

Rent expense for the years ended December 31, 2010, 2009, 2008 and, cumulatively, for the period from October 17, 2001 (date of inception) to December 31, 2010 was $1.2 million, $1.2 million, $1.1 million, and $7.8 million, respectively.

The Company's purchase commitments at December 31, 2010 were $1.9 million, which are primarily for the manufacture and testing of active pharmaceutical ingredient (API) or drug product for clinical testing.

License Agreements

In August 2003, the Company entered into an exclusive worldwide license and development agreement with Baxter International and Baxter Healthcare S.A., together Baxter for certain patent rights and technology associated with glufosfamide and its drug candidates in development. Under the terms of the agreement, the Company made an initial upfront payment of $0.1 million and in December 2003, another milestone payment of $0.1 million. In November 2004, the Company made an additional milestone payment of $1.3 million. The Company will be required to make a milestone payment of $1.0 million within 30 days of filing an NDA for glufosfamide with the FDA. Total additional milestone payments in connection with the development of glufosfamide and United States of America and foreign regulatory submissions and approvals could total $8.0 million. In addition, based on the attainment of specified sales thresholds the Company could be required to make payments totaling $17.5 million. The Company will also be required to make royalty payments upon product commercialization. No royalty payments have been made as of December 31, 2010.

In November 2004, the Company entered into an agreement with MediBIC Co. Ltd. ("MediBIC") to develop glufosfamide in Japan and several other Asian countries, and received an upfront payment of $5.0 million contingent upon the finalization of the clinical development plan. In July 2005, the Company finalized the development plan with MediBIC and began recognizing revenue from the upfront payment on a straight-line basis over the development period, through December 31, 2008. At December 31, 2008 the upfront payment had been fully recognized. The Company was responsible for all development activities under this agreement. The Company was also required to make royalty payments upon product commercialization. The Company may terminate the agreement at any time by making certain payments ranging from $7.0 million to $15.0 million, depending on the stage of development. In 2009, the Company had no further responsibilities for development activities under this agreement and in May 2009, the Company dissolved the JDC comprising MediBIC and the Company. No payments were made by either party as a result of the dissolution of the JDC.

On October 14, 2009, the Company entered into an exclusive license agreement with Eleison Pharmaceuticals, Inc. ("Eleison"). Pursuant to the agreement the Company granted Eleison exclusive worldwide rights to develop and commercialize glufosfamide for the treatment of cancer in humans and animals, and certain other uses. Under the agreement, Eleison is responsible for the development, manufacturing and marketing of glufosfamide. Eleison and the Company will share equally in the profits of commercialization, if the further clinical development of glufosfamide leads to regulatory approval and marketing.

Eleison will pay the Company 50% of its profits from commercialization on a quarterly basis, beginning on the date of first commercial sale, if any. Eleison has the right to sublicense some or all of its rights under the agreement, and will pay the Company 50% of amounts received under any sublicenses, including, without limitation, any royalty payments, license fee payments, milestone payments and payments for any equity or debt purchases by a sublicensee, within 30 days of the receipt of any such amounts or payments by Eleison. Eleison will bear all costs associated with development, commercialization and patent prosecution, and will control product development and commercialization. In addition, Eleison will be responsible for all royalty and milestone payments due under the Baxter license and MediBIC development agreement. The agreement contemplates that Eleison, to satisfy its diligence obligations, will raise sufficient funds to commence clinical development activities with glufosfamide.

Indemnification

The Company enters into indemnification provisions under its agreements with other companies in the ordinary course of business, including business partners, contractors and parties performing its clinical trials. Pursuant to these arrangements, the Company indemnifies, holds harmless, and agrees to reimburse the indemnified parties for losses suffered or incurred by the indemnified party as a result of the Company's activities. The terms of these indemnification agreements are generally perpetual. The maximum potential amount of future payments the Company could be required to make under these agreements is not determinable. The Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the estimated fair value of these agreements is minimal. The Company maintains commercial general liability insurance and products liability insurance to offset certain of its potential liabilities under these indemnification provisions.

The Company's bylaws provide that it is required to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct of a culpable nature, to the fullest extent permissible by applicable law; and to advance their expenses incurred as a result of any proceeding against them as to which they could be indemnified.

Legal Proceedings

As previously disclosed, the Company, its Chief Executive Officer Harold E. Selick and its former Chief Financial Officer, Janet I. Swearson were defendants in a purported class action lawsuit alleging violations of federal securities laws pending in the United States District Court for the Northern District of California. As

previously disclosed, claims against Ms. Swearson were dismissed, as were certain claims against the Company and Dr. Selick. The parties reached a settlement, which was approved by the Court on April 16, 2010. The $10 million amount due under the settlement was paid by the Company's insurers.

NOTE 8—STOCKHOLDERS' EQUITY

Common Stock

On March 16, 2011, the Company sold to certain investors an aggregate of 14,313,081 shares of its common stock for a purchase price equal to $2.05 per share and, for a purchase price of $0.05 per share, warrants exercisable for a total of 5,725,227 shares of its common stock for aggregate gross proceeds equal to $30.1 million in connection with the offering. Net proceeds generated from the offering were approximately $27.8 million, which includes underwriter discounts and estimated offering costs. The warrants have a five-year term and an exercise price equal to 2.46 per share of common stock. The number of shares issuable upon exercise of the warrants and the exercise price are subject to adjustment for subdivisions and stock splits, stock dividends, combinations, reorganizations, reclassifications, consolidations, mergers or sales of properties and assets and upon the issuance of certain assets or securities to holders of our common stock, as applicable.

On October 29, 2010, the Company entered into an at market issuance sales agreement, or sales agreement, with McNicoll, Lewis & Vlak LLC, or MLV, pursuant to which the Company may issue and sell shares of our common stock having an aggregate offering price of up to $15.0 million from time to time through MLV as sales agent. Subject to the terms and conditions of the sales agreement, MLV will use commercially reasonable efforts to sell the Company's common stock from time to time, based upon the Company's instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company will pay MLV an aggregate commission rate of 3.0% of the gross proceeds of the sales price per share of any common stock sold under the sales agreement. Under certain circumstances, sales of the stock under the at market issuances sales agreement could result in an adjustment to the exercise price of certain of our outstanding warrants. As of the year ended December 31, 2010 we had not sold any stock pursuant to the sales agreement. In February and March 2011, we sold 717,132 shares of our common stock at an average price of $2.83 pursuant to the sales agreement. Net proceeds from the sale of stock were $1.8 million. The sale of stock did not result in an adjustment to the exercise price of certain of our outstanding warrants. On March 11, 2011, the Company filed a prospectus supplement reducing the amount of securities for sale under its shelf registration statement pursuant to the sales agreement. The maximum aggregate gross proceeds from potential future sales of common stock under the existing shelf registration statement are $3.8 million.

On October 5, 2009, the Company sold to certain investors an aggregate of 18,324,599 shares of its common stock for a purchase price equal to $1.86 per share and, for a purchase price of $0.05 per share, warrants exercisable for a total of 7,329,819 shares of its common stock for aggregate gross proceeds equal to $35.0 million in connection with the offering. Net proceeds generated from the offering were $33.1 million. The warrants have a five-year term and an exercise price equal to $2.23 per share of common stock. The exercise price of the warrants may be adjusted in certain circumstances, including certain issuances of securities at a price equal to less than the then current exercise price. In addition, the number of shares issuable upon exercise of the warrants and the exercise price are subject to adjustment for subdivisions and stock splits, stock dividends, combinations, reorganizations, reclassifications, consolidations, mergers or sales of properties and assets and upon the issuance of certain assets or securities to holders of our common stock, as applicable. As a result of the offering on March 16, 2011, the exercise price of the warrants exercisable for a total of 7,329,819 shares of common stock sold to investors in October 2009 that had an original exercise price of $2.23 per share, was subsequently reduced to $2.05 per share pursuant to the terms of such warrants.

On August 29, 2008, the Company sold to certain investors an aggregate of 8,970,574 shares of its common stock for a purchase price equal to $2.04 per share for aggregate gross proceeds equal to $18.3 million in connection with the offering. Net proceeds generated from the offering were $16.8 million. As part of the sale of

common stock, the Company also issued warrants exercisable for a total of 3,588,221 shares of its common stock to the investors. The warrants have a five-year term and an exercise price equal to $2.34 per share of common stock. The exercise price and/or the number of shares of common stock issuable upon exercise of the warrants may be adjusted in certain circumstances, including certain issuances of securities at a price equal to less than the then current exercise price, subdivisions and stock splits, stock dividends, combinations, reorganizations, reclassifications, consolidations, mergers or sales of properties and assets and upon the issuance of certain assets or securities to holders of our common stock, as applicable. As a result of the offering on October 5, 2009, the exercise price of the warrants exercisable for a total of 3,588,221 shares of common stock sold to investors in August 2008 that had an original exercise price of $2.34 per share, was subsequently reduced to $1.86 per share pursuant to the terms of such warrants.

On February 4, 2005, the Company completed its initial public offering of 1.0 million shares of common stock for net proceeds totaling $38.1 million. On October 14, 2005, the Company completed a public offering of 1.1 million shares of its common stock for net proceeds totaling $62.4 million. Each share of common stock has the right to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of holders of all classes of stock outstanding having priority rights as to dividends. No dividends have been declared or paid as of December 31, 2010.

Reverse Stock Split and Shares Authorized

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. 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 consolidated 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 be 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. All common share and per share amounts contained in the accompanying consolidated financial statements have been retroactively adjusted to reflect the reverse stock split.

In May 2010, the Company's stockholder's approved the number of authorized shares of common stock be increased from 50,000,000 to 150,000,000.

Common Stock Warrants

The Company accounts for its common stock warrants under guidance now codified in ASC 815 that clarifies the determination of whether an instrument (or an embedded feature) is indexed to an entity's own stock, which would qualify for classification as liabilities. The guidance required the Company's outstanding warrants to be classified as liabilities and to be fair valued at each reporting period, with the changes in fair value recognized as other income (expense) in the Company's consolidated statement of operations.

At December 31, 2010 and 2009, the Company had warrants outstanding to purchase 3,588,221 shares of common stock from the August 2008 offering. The fair value of these warrants on December 31, 2010 and 2009 was determined using a Black Scholes valuation model with the following level 3 inputs:

	December 31, 2010	December 31, 2009
Risk-free interest rate	1.02%	2.29%
Expected life (in years)	2.66	3.66
Dividend yield	—	—
Volatility	94%	95%
Stock price	$ 1.35	$ 1.80

On January 1, 2009, Company recorded a cumulative effect of change in accounting principle adjustment to its deficit accumulated during development stage of $0.5 million and a corresponding reclassification of the Company's outstanding warrants from stockholder's equity to warrant liability. During the year ended December 31, 2010, a change in fair value of $1.8 million related to the August 2008 warrants was recorded as other income in the Company's consolidated statement of operations.

At December 31, 2010 and 2009, the Company had warrants outstanding to purchase 7,329,819 shares of common stock from the October 2009 offering. The fair value of these warrants on December 31, 2010 and 2009 was determined using a Black Scholes valuation model with the following level 3 inputs:

	December 31, 2010	December 31, 2009
Risk-free interest rate	1.40%	2.62%
Expected life (in years)	3.76	4.76
Dividend yield	—	—
Volatility	88%	87%
Stock price	$ 1.35	$ 1.80

On October 5, 2009, the Company determined the fair value of the warrants to be $9.8 million and classified that amount of the net proceeds from the October 2009 offering to warrant liability. During the year ended December 31, 2010, a change in fair value of $3.4 million related to the October 2009 warrants was recorded as other income in the Company's consolidated statement of operations.

The following table sets forth the Company's financial liabilities, related to warrants issued in the August 2008 and October 2009 offerings, subject to fair value measurements as of December 31, 2010:

	Fair Value as of December 31, 2010	Basis of Fair Value Measurements		
(in thousands)		Level 1	Level 2	Level 3
Common stock warrants	$ 7,499	$ —	$ —	$ 7,499

The following table is a reconciliation of the warrant liability measured at fair value using level 3 inputs (in thousands):

	Warrant Liability
Balance at December 31, 2009	$ 12,665
Change in fair value of common stock warrants during 2010	(5,166)
Balance at December 31, 2010	$ 7,499

Preferred Share Rights Agreement

On August 8, 2006, the Board of Directors adopted a Preferred Shares Rights Agreement. As part of this agreement, preferred stock purchase rights ("the rights") were distributed to stockholders of record as of August 23, 2006, at the rate of one right for each share of common stock held. The rights become exercisable only upon the acquisition, or the acquisition of the right to acquire, by a person or group of affiliated or associated persons, 15% or more of the outstanding shares of the Company's common stock. Once exercisable, each right entitles the holder to purchase, at a price of $25.00, six one-thousandth of a share of Series A Participating Preferred Stock. For a limited period of time following the announcement of any such acquisition or offer, the rights are redeemable by the Company at a price of $0.01 per right. If the rights are not redeemed or exchanged, each right will then entitle the holder to receive, upon exercise of such right, a number of shares of the Company's common stock having a then current value equal to two times the purchase price of such right. Similarly, if the rights are not redeemed or exchanged and following the acquisition of 15% or more of the outstanding shares of the Company's common stock by a person or group of affiliated or associated persons,

(i) the Company consolidates with or merges into another entity, (ii) another entity consolidates with or merges into the Company or (iii) the Company sells or otherwise transfers 50% or more of its consolidated assets or earning power, each right will then entitle the holder to receive, upon exercise of such right, a number of shares of common stock of the acquiring company having a then current value equal to two times the purchase price. For a limited period of time after the exercisability of the rights, each right, at the discretion of the Board of Directors, may be exchanged for one share of common stock per right. The Company has initially reserved 200,000 shares of preferred stock pursuant to the exercise of these rights. These rights expire on August 8, 2016.

Effective July 9, 2008, the Company entered into an amendment (the "First Amendment") to that certain Preferred Shares Rights Agreement, dated as of August 8, 2006, by and between the Company and Mellon Investor Services LLC (the "Rights Agreement"). The First Amendment amended certain terms in the Rights Agreement so that the Company could announce and consummate the 2008 offering of common stock and warrants described above without triggering the Rights Agreement.

Effective September 29, 2009, the Company entered into an additional amendment (the "Second Amendment") to the Rights Agreement. The Second Amendment amended certain terms in the Rights Agreement so that the Company could announce and consummate the 2009 offering described above without triggering the Rights Agreement.

NOTE 9—EQUITY INCENTIVE PLANS AND STOCK BASED COMPENSATION

2004 Equity Incentive Plan

On April 7, 2004, the Board of Directors adopted the 2004 Equity Incentive Plan (the "2004 Plan"), and received stockholder approval on January 10, 2005. The 2004 Plan became effective upon the completion of the Company's initial public offering and provides for the granting of incentive stock options, nonstatutory stock options, stock appreciation rights, stock awards and cash awards to employees and consultants. Options granted under the 2004 Plan may be either incentive stock options ("ISOs") or nonqualified stock options ("NSOs"). ISOs may be granted only to Company employees (including officers and directors who are also employees). NSOs may be granted to Company employees and consultants. Stock options may be granted with an exercise price not less than 100% of the fair market value of the common stock on the date of grant. Stock options are generally granted with terms of up to ten years and vest over a period of four years.

In 2005, 404,801 shares of common stock were authorized for issuance pursuant to the 2004 Plan, plus any shares which had been reserved but not issued under the 2001 Equity Incentive Plan (the "2001 Plan") or issued and forfeited after the date of the initial public offering, plus any shares repurchased at or below the original purchase price and any options which expire or become unexercisable after the initial public offering, thereafter plus all shares of common stock restored by the Board of Directors pursuant to the provision of the 2004 Plan that permits options to be settled on a net appreciation basis. The Company will not grant any options under the 2001 Plan after the effectiveness of the 2004 Plan. On January 1, 2006, and annually thereafter, the authorized shares under the 2004 Plan will be automatically increased by a number of shares equal to the lesser of:

- 5% of the number of the Company's shares issued and outstanding prior to the preceding December 31;
- 202,401 shares;
- an amount determined by the Board of Directors.

On March 1, 2010 the Board of Directors approved an addition of 2,250,000 shares for issuance under the 2004 Plan and on May 19, 2010 the stockholders of the Company approved the same addition of 2,250,000 shares for issuance under the 2004 Plan. The annual automatic increase to the authorized shares under the 2004 Plan was amended, effective January 1, 2011 to the lesser of:

- 5% of the number of the Company's shares issued and outstanding prior to the preceding December 31;
- 1,250,000 shares;
- an amount determined by the Board of Directors.

On December 20, 2005, the Board of Directors approved an addition of 202,401 shares for issuance under the 2004 Plan effective January 1, 2006. On April 2, 2007, the Board of Directors approved an addition of 202,401 shares for issuance under the 2004 Plan effective January 1, 2007. On January 15, 2009, the Board of Directors approved an addition of 202,401 shares for issuance under the 2004 Plan effective January 1, 2009. On March 1, 2010, the Board of Directors approved an addition of 202,401 shares for issuance under the 2004 Plan effective January 1, 2010.

Activity under the 2001 Plan and 2004 Plan is set forth below:

	Shares Available for Grant	Outstanding Options		Weighted Average Exercise Price
		Number of Shares	Exercise Price	
Shares reserved at Plan inception	202,400	—	$ —	$ —
Balances, December 31, 2001	202,400	—	—	—
Options granted	(179,992)	179,992	0.96	0.96
Options exercised	—	(405)	0.96	0.96
Balances, December 31, 2002	22,408	179,587	0.96	0.96
Additional shares reserved	506,000	—	—	—
Options granted	(121,092)	121,092	0.96–1.56	0.96
Options exercised	—	(1,285)	0.96	0.96
Options canceled	927	(927)	0.96	0.96
Balances, December 31, 2003	408,243	298,467	0.96–1.56	0.96
Options granted	(370,372)	370,372	1.56–3.18	2.16
Options exercised	—	(586,365)	0.96–3.18	1.50
Options canceled	7,926	(7,926)	0.96–3.18	1.68
Balances, December 31, 2004	45,797	74,549	0.96–3.18	2.70
Additional shares reserved	404,800	—	—	—
Options granted	(157,849)	157,849	3.18–89.88	49.32
Options exercised	—	(75,545)	0.96–3.18	2.94
Options canceled	2,475	(2,475)	34.80–74.70	39.72
Options repurchased	10,664	—	0.96–3.18	2.46
Balances, December 31, 2005	305,887	154,378	0.96–89.88	49.74
Additional shares reserved	202,401	—	—	—
Options granted (1)	(744,228)	744,228	9.30–99.12	41.94
Options exercised	—	(22,023)	1.56–37.56	5.52
Options canceled (1)	530,831	(530,831)	3.18–99.12	62.88
Options repurchased	27,091	—	0.96–3.18	2.94
Balances, December 31, 2006	321,982	345,752	0.96–89.88	15.60
Additional shares reserved	202,401	—		
Options granted	(283,396)	283,396	3.84–21.66	11.04
Options exercised	—	(337)	3.18–15.42	14.52
Options canceled	131,672	(131,672)	3.18–84.24	16.62
Options repurchased	16,410	—	1.56–3.18	2.10
Balances, December 31, 2007	389,069	497,139	0.96–89.88	12.72
Options granted	(239,538)	239,538	0.42–3.18	2.84
Options exercised	—	(727)	1.56	1.56
Options canceled	118,852	(118,852)	0.96–89.88	15.14
Options repurchased	47	—	3.13	2.10
Balances, December 31, 2008	268,430	617,098	0.42–21.66	8.41
Additional shares reserved	202,401	—		
Options granted (2)	(955,265)	955,265	0.79–3.08	1.17
Options exercised	—	(8,764)	0.79–1.30	1.14
Options canceled (2)	627,939	(627,939)	0.79–21.66	8.28
Balances, December 31, 2009	143,505	935,660	0.42–21.66	1.17
Additional shares reserved	2,452,401	—		
Options granted	(1,849,500)	1,849,500	0.99–1.88	1.45
Options exercised	—	(20,000)	0.79–1.30	1.05
Options canceled	19,442	(19,442)	0.79–1.95	1.61
Balances, December 31, 2010	765,848	2,745,718	$ 0.42–3.18	$ 1.36

(1) Includes 362,000 options that had a weighted average exercise price of $74.22, which were canceled and re-granted at an exercise price of $15.42 in September 2006.
(2) Includes 559,665 options that had a weighted average exercise price of $8.08, which were canceled and re-granted at an exercise price of $1.30 in February 2009.

At December 31, 2010, stock options outstanding and exercisable by exercise price were as follows:

Options Outstanding				Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$0.42 – 0.79	310,488	7.96	$ 0.78	178,723	$ 0.78
$0.99 – 1.29	77,000	6.70	1.16	2,666	1.22
$1.30 – 1.32	534,609	6.41	1.30	424,568	1.30
$1.44 – 1.44	1,583,020	9.38	1.44	231,715	1.44
$1.59 – 1.95	235,500	9.13	1.74	95,899	1.80
$2.22 – 3.18	5,101	6.17	3.01	2,793	3.01
$0.42 – 3.18	2,745,718	8.54	$ 1.36	936,364	$ 1.29

The aggregate intrinsic value of options outstanding and options exercisable as of December 31, 2010 were $0.2 million and $0.1 million, respectively. As of December 31, 2010, the ending options vested and expected to vest was 2,711,953 and the aggregate intrinsic value of these options was $0.2 million. The weighted average remaining contractual life and weighted average exercise price of these options were 8.53 years and $1.36, respectively. The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the quoted price of the Company's common stock for options that were in-the-money at December 31, 2010.

The total intrinsic value of stock options exercised during the years ended December 31, 2010, 2009 and 2008 were $15,000, $8,000 and $400, respectively, determined at the date of the option exercise. Cash received from stock option exercises were $21,000, $10,000 and $1,000 for the years ended December 31, 2010, 2009 and 2008, respectively. The Company issues new shares of common stock upon exercise of options. In connection with these exercises, there was no tax benefit realized by the Company due to its current loss position.

On February 13, 2009, the Company cancelled 559,665 options of 41 eligible employees, consultants and directors that had a weighted average exercise price of $8.08 and re-granted 559,665 options at an exercise price of $1.30, which was the Company's closing price on February 17, 2009. As a result of the repricing of options of eligible employees and directors, the Company will incur an incremental stock-based compensation expense of $0.2 million over the weighted average vesting period of the repriced options of 2.2 years. The incremental compensation cost was measured as the fair value of the new stock option award over the fair value of the original stock option award based on the closing price on the date of re-grant. The incremental expense related to the repricing recorded for the years ended December 31, 2010 and 2009 was not significant.

2004 Employee Stock Purchase Plan

Effective with the initial public offering, the Board of Directors approved the 2004 Employee Stock Purchase Plan (the "Purchase Plan"). The Purchase Plan contains consecutive, overlapping 24 month offering periods. Each offering period includes four six-month purchase periods. The price of the common stock purchased will be the lower of 85% of the fair market value of the common stock at the beginning of an offering period or at the end of the purchase period. For the year ended December 31, 2010, employees had purchased 118,572 shares of common stock under the Purchase Plan at an average price of $1.01.For the year ended December 31, 2009, employees had purchased 16,263 shares of common stock under the Purchase Plan at an average price of $1.04. At December 31, 2010, plan participants had $0.1 million withheld to purchase stock on February 14, 2011, which is included in accrued liabilities on the accompanying consolidated balance sheet. At December 31, 2010, 384,330 shares were authorized and available for issuance under the ESPP.

Directors Compensation Program

In December 2005, the Board of Directors approved revised compensation arrangements for non-employee directors of the Company. Effective January 1, 2006, non-employee directors receive an annual retainer of $30,000, and, in addition, chairpersons of the Audit, Compensation and Nominating and Corporate Governance Committees receive annual retainers of $16,000, $14,000, and $10,000, respectively. In May 2005, each non-employee director was granted an option to purchase 2,500 shares of the Company's common stock under the Company's 2004 Equity Incentive Plan. In addition, at each annual meeting of stockholders of the Company, each non-employee director who has served as director at least six months prior to such meeting will receive an automatic grant of an option to purchase 2,500 shares of the Company's common stock. Pursuant to the provisions of the plan, in May 2008, May 2007 and June 2006, each of the five non-employee directors received an automatic grant of 2,500 shares of the Company's common stock in each respective year. In addition, in November 2008 and April 2007, pursuant to the provisions of the plan, a newly elected non- employee director on each respective date received an automatic grant of 5,000 shares.

In January 2009, each of the five non-employee directors received a one-time grant to purchase 10,000 shares of the Company's common stock. In May 2009, at the Company's annual meeting, an amendment to the Company's 2004 Equity Incentive Plan to increase the size of the automatic annual option grant to continuing non-employee directors from 2,500 shares to 10,000 shares, was approved by the shareholder of the Company. In accordance with the amendment, each of the five non-employee directors received an automatic grant of an option to purchase 10,000 shares of the Company's common stock. In May 2010, at the Company's annual meeting, an amendment to the Company's 2004 Equity Incentive Plan to increase the size of the automatic annual option grant to continuing non-employee directors from 10,000 shares to 12,500 shares, was approved by the shareholder of the Company. In accordance with the amendment, each of the five non-employee directors received an automatic grant of an option to purchase 12,500 shares of the Company's common stock. In addition, in May 2010, pursuant to the provisions of the plan, a newly elected non- employee director received an automatic grant of 25,000 shares

Stock-based Compensation

The Company recognizes stock-based compensation in accordance with ASC 718, *"Compensation—Stock Compensation,"* using the modified prospective transition method, except for options granted prior to the Company's initial public offering in February 2005, for which the fair value was determined for disclosure purposes using the minimum value method. Under this transition method, stock-based compensation cost recognized for the years ended December 31, 2010, 2009 and 2008 includes:

- compensation cost for all unvested stock-based awards as of January 1, 2006 that were granted subsequent to the Company's initial public offering in February 2005, and prior to January 1, 2006, that were earned during the years ended December 31, 2010, 2009 and 2008 based on the recognition of the grant date fair value estimated in accordance with ASC 815 over the service period, which is generally the vesting period;
- compensation cost for all stock-based awards granted or modified subsequent to January 1, 2006, that were earned during the years ended December 31, 2010, 2009 and 2008 based on the recognition of the grant date fair value estimated in accordance with the provisions of ASC 815 over the service period, which is generally the vesting period; and
- compensation cost for options granted prior to the Company's initial public offering in February 2005 that were earned during the years ended December 31, 2009 and 2008 based on the grant date intrinsic value over the service period, which is generally the vesting period.

In addition, ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Stock-based compensation expense recognized under ASC 718 in the Company's consolidated statement of operations for the years ended December 31, 2010, 2009 and 2008 related to stock options and ESPP were $0.8 million, $2.2 million and $3.2 million, respectively.

Valuation Assumptions

The Company estimated the fair value of stock options granted using the Black-Scholes option-pricing formula and a single option award approach. This fair value is being amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period. The fair value of employee stock options and employee purchase rights under the Company's ESPP was estimated using the following weighted-average assumptions for the years ended December 31, 2010, 2009 and 2008:

	Years ended December 31,		
	2010	2009	2008
Employee Stock Options			
Risk-free interest rate	2.35%	1.71%	3.10%
Expected life (in years)	5.99	5.71	5.97
Dividend yield	—	—	—
Volatility	85%	84%	83%
Weighted-average fair value of stock options granted	$1.05	$0.51	$2.10
Employee Stock Purchase Plan			
Risk-free interest rate	0.40%	0.71%	2.14%
Expected life (in years)	1.25	1.25	1.25
Dividend yield	—	—	—
Volatility	88%	67%	67%
Weighted-average fair value of ESPP purchase rights	$0.80	$0.52	$0.94

To determine the expected term of the Company's employee stock options granted the Company utilized the simplified approach as defined by SEC Staff Accounting Bulletin No. 107, *"Share-Based Payment"* ("SAB 107"). To determine the risk-free interest rate, the Company utilized an average interest rate based on U.S. Treasury instruments with a term consistent with the expected term of the Company's stock based awards. To determine the expected stock price volatility for the Company's stock based awards, the Company examined historical volatilities for industry peers as well as the Company and utilized a blend of the historical volatilities of the Company and its industry peers. The fair value of all the Company's stock based award assumes no dividends as the Company does not anticipate paying cash dividends on its common stock.

Employee Stock-based Compensation Expense

Deferred Stock-based Compensation Prior to the Company's initial public offering in February 2005, the Company issued options to certain employees under the 2001 Plan with exercise prices below the fair market value of the Company's common stock at the date of grant, determined with hindsight. In accordance with the requirements of ASC 718, the Company has recorded deferred stock-based compensation for the difference between the exercise price of the stock option and the fair market value of the Company's stock at the date of grant. This deferred stock-based compensation is amortized to expense on a straight-line basis over the period during which the Company's right to repurchase the stock lapses or the options vest, generally four years. In accordance with the requirements of ASC 718, the Company recorded deferred stock-based compensation aggregating $19.5 million, net of forfeitures. Through December 31, 2009, the Company had amortized the entire $19.5 million as compensation expense, net of forfeitures, with approximately $6,000, and $0.8 million being amortized for the years ended December 31, 2009 and 2008, respectively.

Stock-based Compensation Expense As required by ASC 718 the Company recognized $0.8 million, $2.2 million and $2.4 million of stock-based compensation expense related to stock options granted and purchase rights granted subsequent to the Company's initial public offering in February 2005, under the Company's stock option plans, for the years ended December 31, 2010, 2009 and 2008, respectively, in addition to the amortization of deferred compensation above. As of December 31, 2010, the total unrecognized compensation cost related to unvested stock-based awards granted to employees under the Company's stock option plans was approximately $1.9 million before estimated forfeitures. This cost will be recorded as compensation expense on a straight-line basis over the remaining weighted average requisite service period of approximately 3.1 years.

Non-employee Stock-based Compensation Expense

Stock-based compensation expense related to stock options granted to non-employees is recognized on a straight-line basis, as the stock options are earned. The Company issued options to non-employees, which generally vest ratably over the time period the Company expects to receive services from the non-employee. The values attributable to these options are amortized over the service period and the unvested portion of these options was remeasured at each vesting date. The Company believes that the fair value of the stock options is more reliably measurable than the fair value of the services received. The fair value of the stock options granted were revalued at each reporting date using the Black-Scholes valuation model as prescribed by ASC 505, "Equity," using the following assumptions:

	Years Ended December 31,		
	2010	2009	2008
Risk-free interest rate	1.94%	2.54%	3.00%
Expected life (in years)	5.00	5.26	6.02
Dividend yield	—	—	—
Expected volatility	85%	84%	83%

The stock-based compensation expense will fluctuate as the fair market value of the common stock fluctuates. In connection with the grant of stock options to non-employees, the Company recorded stock-based compensation of approximately $37,000, $27,000 and $26,000 for the years ended December 31, 2010, 2009 and 2008, respectively.

Total stock-based compensation expense was allocated to research and development and general and administrative as follows (in thousands):

	Year Ended December 31,		
	2010	2009	2008
Stock-based compensation expense:			
Research and development	$381	$1,003	$1,504
General and administrative	422	1,208	1,748
	$803	$2,211	$3,252

NOTE 10—INCOME TAXES

A reconciliation of income taxes at the statutory federal income tax rate to net income taxes included in the accompanying statements of operations is as follows (in thousands):

	2010	2009	2008
U.S. federal taxes (benefit) at statutory rate	$(6,353)	$(8,040)	$(6,219)
State federal income tax benefit	(1,593)	(1,284)	(1,132)
Unutilized (utilized) net operating losses	9,392	7,396	6,549
Stock-based compensation	224	936	602
Research and development credits	(732)	(503)	(347)
Tax assets not benefited	957	703	543
Non deductible warrant expense	(1,756)	786	—
Other	(139)	6	4
Total	$ —	$ —	$ —

The tax effects of temporary differences that give rise to significant components of the net deferred tax assets are as follows (in thousands):

	December 31,		
	2010	2009	2008
Capitalized start-up costs	$ 267	$ 296	$ 330
Net operating loss carryforwards	25,765	16,328	48,545
Research and development credits	2,953	1,870	2,903
Deferred stock compensation	8,726	8,674	8,890
Other (accruals, reserves, depreciation)	1,208	1,457	1,238
Total deferred tax assets	38,919	28,625	61,906
Less: Valuation allowance	(38,919)	(28,625)	(61,906)
	$ —	$ —	$ —

At December 31, 2010, the Company had both federal and state net operating loss carryforwards of approximately $65 million available to offset future taxable income. The Company's federal and state net operating loss carryforwards will begin to expire in 2022 and 2014, respectively, if not used before such time to offset future taxable income or tax liabilities. For federal and state income tax purposes, a portion of the Company's net operating loss carryforward is subject to certain limitations on annual utilization in case of changes in ownership, as defined by federal and state tax laws. The annual limitation may result in the expiration of the net operating loss before utilization.

At December 31, 2010, the Company had federal research and development tax credits of approximately $0.9 million, which expire in the year beginning 2030, and state research and development tax credits of approximately $3.2 million, which have no expiration date. During the year ended December 31, 2009, the Company wrote down its deferred tax assets related to net operating loss carryforwards and tax credits that are expected to expire before utilization due to the annual limitation.

The Company has established a valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets. The valuation allowance increased by $10.3 million for the year ended December 31, 2010, and decreased by $33.3 million and $4.4 million for the year ended December 31, 2009 and 2008, respectively.

The Company adopted ASC Topic 740-10-50 "Accounting for Uncertainty of Income Taxes" ("ASC Topic 740-10-50"), on January 1, 2007. The Company does not believe that its unrecognized tax benefits will change over the next twelve months.

The following table summarizes the activity related to our gross unrecognized tax benefits:

(in thousands)	2010	2009
Gross unrecognized tax benefits at January 1,	$1,100	$1,100
Gross increases (decreases) related to prior year tax positions	—	—
Gross increases (decreases) related to current year tax positions	—	—
Settlements	—	—
Expiration of the statute of limitations for the assessment of taxes	—	—
Gross unrecognized tax benefits at December 31,	$1,100	$1,100

The Company's practice is to recognize interest and/or penalties related to income tax matters in income tax expense. As of December 31, 2010 and 2009, the Company had no accrued interest or penalties due to the Company's net operating losses available to offset any tax adjustment. The Company currently has no federal or state tax examinations in progress nor has it had any federal or state tax examinations since its inception. As a result of the Company's net operating loss carryforwards, all of its tax years are subject to federal and state tax examination.

NOTE 11—EMPLOYEE BENEFIT PLAN

In November 2002, the Company implemented a 401(k) plan to provide a retirement savings program for the employees of the Company. The 401(k) plan is maintained for the exclusive purpose of benefiting the 401(k) plan participants. The 401(k) plan is intended to operate in accordance with all applicable state and federal laws and regulations and, to the extent applicable, the provisions of Department of Labor regulations issued pursuant to ERISA Section 404(c). As of December 31, 2010, the Company has not made any contributions to the 401(k) plan.

NOTE 12—QUARTERLY FINANCIAL DATA (UNAUDITED)

The following table presents certain unaudited quarterly financial information for the eight quarters ended December 31, 2010. This information has been prepared on the same basis as the audited consolidated financial statements and includes all adjustments necessary to state fairly the unaudited quarterly results of operations. Net loss per common share, basic and diluted for the four quarters of each fiscal year, may not sum to the total for the fiscal year because of the different weighted average number of shares outstanding in each of the periods.

2010	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
(in thousands, except per share data)				
Revenue	$ —	$ —	$ —	$ —
Net loss attributable to common stockholders	$ (5,959)	$ (261)	$ (5,908)	$ (6,554)
Net loss per common share, basic and diluted	$ (0.18)	$ (0.01)	$ (0.18)	$ (0.19)
Weighted average number of shares used in basic and diluted net loss per common share calculations	33,603	33,638	33,672	33,702

2009	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
(in thousands, except per share data)				
Revenue	$ —	$ —	$ —	$ —
Net loss attributable to common stockholders	$ (6,543)	$ (6,219)	$ (6,153)	$ (4,733)
Net loss per common share, basic and diluted	$ (0.43)	$ (0.41)	$ (0.40)	$ (0.15)
Weighted average number of shares used in basic and diluted net loss per common share calculations	15,218	15,223	15,227	32,566

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation as of December 31, 2010, under the supervision and with the participation of our management, including our Chief Executive Officer and Senior Director, Finance and Controller, of the effectiveness of the design and operation of our disclosure controls and procedures, which are defined under SEC rules as controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files under the Securities Exchange Act of 1934 (Exchange Act) is recorded, processed, summarized and reported within required time periods and that the information accumulated and communicated to our management, including our Chief Executive Officer and Senior Director, Finance and Controller is appropriate, to allow timely decisions, regarding required disclosure. Based upon that evaluation, our Chief Executive Officer and Senior Director, Finance and Controller concluded that, as of such date, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act. Internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Senior Director, Finance and Controller, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on criteria established in the *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Management's assessment included evaluation of such elements as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies, and our overall control environment. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2010.

Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Senior Director, Finance and Controller, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefit of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Threshold Pharmaceuticals, Inc. have been detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Changes in Internal Controls over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the fourth quarter of the year ended December 31, 2010 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item will be contained in our Proxy Statement for the 2010 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2010 and is hereby incorporated by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be contained in our Proxy Statement for the 2010 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2010 and is hereby incorporated by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be contained in our Proxy Statement for the 2010 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2010 and is hereby incorporated by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be contained in our Proxy Statement for the 2010 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2010 and is hereby incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item will be contained in our Proxy Statement for the 2010 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2010 and is hereby incorporated by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following documents are being filed as part of this report:

(1) The following financial statements of the Company and the report of PricewaterhouseCoopers LLP are included in Part II, Item 8:

(2) All financial statement supporting schedules are omitted because the information is inapplicable or presented in the Notes to Consolidated Financial Statements.

EXHIBIT NUMBER	DESCRIPTION
3.1	Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.4 to our Annual Report on Form 10-K filed on March 13, 2009)
3.3	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.3 to our Quarterly Report on Form 10-Q filed on November 4, 2010)
3.4	Amended and Restated Bylaws of the Registration (incorporated by reference to Exhibit 3.4 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
3.5	Certificate of Designations of Rights, Powers and Preferences of Series A Participating Preferred Stock of Registrant (incorporated by reference to Exhibit 3.3 to our Current Report on Form 8-K filed on August 9, 2006)
4.1	Specimen Certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
4.2	Amended and Restated Investor Rights Agreement dated November 17, 2003 among the Registrant and the parties listed therein (incorporated by reference to Exhibit 4.3 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
4.3	Form of Amendment No. 1 to Amended and Restated Investor Rights Agreement among the Registrant and certain parties to the Amended and Restated Investor Rights Agreement (incorporated by reference to Exhibit 4.4 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
4.4	Preferred Shares Rights Agreement, dated August 8, 2006, by and between Registrant and Mellon Investor Services LLC (incorporated by reference to Exhibit 4.5 to our Current Report on Form 8-K filed on August 9, 2006)
4.5	Form of Rights Certificate (incorporated by reference to Exhibit 4.6 to our Current Report on Form 8-K filed on August 9, 2006)

EXHIBIT NUMBER	DESCRIPTION
4.6	Amendment to Rights Agreement dated July 10, 2008 between the Registrant and Mellon Investor Services LLC (incorporated by reference to Exhibit 4.2 to our Current Report on Form 8-K filed on July 14, 2008)
4.7	Second Amendment to Rights Agreement dated as of September 29, 2009 between the Registrant and Mellon Investor Services LLC (incorporated by reference to Exhibit 4.2 to our Current Report on Form 8-K filed on September 30, 2009)
4.8	Form of Warrant (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed on July 14, 2008)
4.9	Form of Warrant (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed on September 30, 2009)
4.10	Form of Indenture (incorporated by reference to Exhibit 4.1 to our Registration Statement on Form S-3 filed on September 30, 2010)
10.1+	2001 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.2+	2004 Amended and Restated Equity Incentive Plan (as amended on May 22, 2009) (incorporated by reference to Exhibit 99.1 to our Registration Statement on Form S-8 (File No. 333-164865), filed on February 11, 2010)
10.3+	Amended and Restated 2004 Employee Stock Purchase Plan (as amended and restated effective May 22, 2009) (incorporated by reference to Exhibit 99.2 to our Registration Statement on Form S-8 (File No. 333-164865) filed on February 11, 2010)
10.4†	Agreement between the Registrant, Baxter International Inc. and Baxter Oncology GmbH, dated August 5, 2003 (incorporated by reference to Exhibit 10.6 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.5†	Exclusive License Agreement by and between the Registrant, Dr. Theodore Lampidis and Dr. Waldemar Priebe, dated November 11, 2002 (incorporated by reference to Exhibit 10.7 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.6	Loan and Security Agreement by and between the Registrant and Silicon Valley Bank, dated March 27, 2003 (incorporated by reference to Exhibit 10.8 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.7	Amendment to Loan and Security Agreement by and between the Registrant and Silicon Valley Bank, dated April 7, 2006 (incorporated by reference to Exhibit 10.26 to our Quarterly Report on Form 10-Q filed on May 15, 2006)
10.8+	Form of Indemnification Agreement by and between the Registrant and its officers and directors (incorporated by reference to Exhibit 10.9 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.9†	Agreement by and between the Registrant and Aziende Chimiche Riunite Angelini Francesco - Acraf S.p.a. dated June 24, 2004 (incorporated by reference to Exhibit 10.10 to our Annual Report on Form 10-K filed on March 28, 2006)
10.10	Sublease by and between the Registrant and ArQule, Inc. dated as of August 31, 2004 (incorporated by reference to Exhibit 10.11 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.11	Offer Letter by and between the Registrant and William A. Halter dated September 3, 2004 (incorporated by reference to Exhibit 10.12 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)

EXHIBIT NUMBER	DESCRIPTION
10.12	Offer Letter by and between the Registrant and George G.C. Parker dated September 3, 2004 (incorporated by reference to Exhibit 10.13 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004).
10.13†	Development Agreement by and between the Registrant and MediBIC Co. Ltd., dated November 30, 2004 (incorporated by reference to Exhibit 10.14 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004).
10.14	Letter Agreement amending Development Agreement by and between the Registrant and MediBIC Co. Ltd. (incorporated by reference to Exhibit 10.18 to our Registration Statement on Form S-1, as amended (File No. 333-114376), filed on April 9, 2004)
10.15+	2004 Amended and Restated Equity Incentive Plan (incorporated by reference to Exhibit 10.20 to our Current Report on Form 8-K filed on May 24, 2005)
10.16+	Consulting Agreement and Amendment to Stock Vesting Agreement by and between the Registrant and Dr. George F. Tidmarsh dated August 18, 2005 (incorporated by reference to Exhibit 10.20 to our Current Report on Form 8-K filed on August 19, 2005)
10.17	Triple Net Space Lease by and between the Registrant and Pacific Shores Investors, LLC, dated January 31, 2006 (incorporated by reference to Exhibit 10.24 to our Current Report on Form 8-K filed on February 9, 2006)
10.18	Form of Notice of Grant of Stock Options and Stock Option Agreement (incorporated by reference to Exhibit 10.25 to our Current Report on Form 8-K filed on March 17, 2006)
10.19+	Offer Letter by and between the Registrant and John G. Curd dated October 3, 2007 (incorporated by reference to Exhibit 10.34 to our Current Report on Form 8-K filed on October 25, 2007)
10.20+	Change of Control and Severance Agreement by and between the Registrant and John G. Curd dated October 19, 2007 (incorporated by reference to Exhibit 10.35 to our Current Report on Form 8-K filed on October 25, 2007)
10.21+	Offer Letter by and between the Registrant and Joel A. Fernandes dated November 1, 2007 (incorporated by reference to Exhibit 10.36 to our Current Report on Form 8-K filed on November 2, 2007)
10.22	Form of Securities Purchase Agreement dated July 9, 2008 (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on July 14, 2008)
10.23+	Form of Amended and Restated Change of Control Severance Agreement dated November 19, 2008 (incorporated by reference to Exhibit 10.41 to our Current Report on Form 8-K filed on November 21, 2008)
10.24	Form of Securities Purchase Agreement dated as of September 29, 2009 (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on September 30, 2009)
10.25	Waiver of rights, dated October 19, 2009, by the Federated Kaufmann Fund (“Kaufmann”), under Section 4.7 of the Securities Purchase Agreement dated as of September 29, 2009 between the Registrant and Kaufmann (incorporated by reference to Exhibit 10.25 to our Annual Report on Form 10-K filed on March 8, 2010)
10.26†	Exclusive License Agreement dated October 14, 2009 (effective October 5, 2009) by and between the Registrant and Eleison Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.26 to our Annual Report on Form 10-K filed on March 8, 2010)
10.27	At Market Issuance Sales Agreement by and between the Registrant and McNicoll, Lewis & Vlak LLC dated October 29, 2010 (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on October 29, 2010)

EXHIBIT NUMBER	DESCRIPTION
23.1*	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1*	Certification Pursuant to Rule 15d-14 of the Securities and Exchange Act of 1934, as amended, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification Pursuant to Rule 15d-14 of the Securities and Exchange Act of 1934, as amended, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Filed herewith.

† Confidential treatment granted as to certain portions, which portions have been omitted and filed separately with the SEC.

+ Indicates a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

March 24, 2011

By: /s/ HAROLD E. SELICK, PH.D.
Harold E. Selick, Ph.D.
Chief Executive Officer

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ HAROLD E. SELICK, PH.D. **Harold E. Selick, Ph.D.**	Chief Executive Officer (principal executive officer)	March 24, 2011
/s/ JOEL A. FERNANDES **Joel A. Fernandes**	Senior Director, Finance and Controller (principal financial and accounting officer)	March 24, 2011
/s/ JEFFREY W. BIRD, M.D., PH.D. **Jeffrey W. Bird, M.D., Ph.D.**	Director	March 24, 2011
/s/ BRUCE C. COZADD **Bruce C. Cozadd**	Director	March 24, 2011
/s/ DAVID R. HOFFMANN **David R. Hoffmann**	Director	March 24, 2011
/s/ WILFRED E. JAEGER, M.D. **Wilfred E. Jaeger, M.D.**	Director	March 24, 2011
/s/ GEORGE G. C. PARKER, PH.D. **George G. C. Parker, Ph.D.**	Director	March 24, 2011
/s/ DAVID R. PARKINSON, M.D. **David R. Parkinson, M.D.**	Director	March 24, 2011

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-169689, 333-162719 and 333-153475) and Registration Statement on Form S-8 (No. 333-167260, 333-164865, No. 333-156733, No. 333-126276, No. 333-134598, and No. 333-143130) of Threshold Pharmaceuticals, Inc. of our report dated March 24, 2011 relating to the consolidated financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 24, 2011

Exhibit 31.1

Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Harold E. Selick, certify that:

1. I have reviewed this Form 10-K of Threshold Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 24, 2011

/s/ HAROLD E. SELICK, PH.D.
Harold E. Selick, Ph.D.
Chief Executive Officer

Exhibit 31.2

Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Joel A. Fernandes, certify that:

1. I have reviewed this Form 10-K of Threshold Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 24, 2011

/s/ JOEL A. FERNANDES
Joel A. Fernandes
Senior Director, Finance and Controller
(Principal Accounting Officer)

Exhibit 32.1

Threshold Pharmaceuticals, Inc

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Threshold Pharmaceuticals, Inc (the "Company") on Form 10-K for the year ended December 31, 2010, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Harold E. Selick, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 24, 2011

/s/ Harold E. Selick, Ph.D.
Harold E. Selick, Ph.D.
Chief Executive Officer

Exhibit 32.2

Threshold Pharmaceuticals, Inc

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Threshold Pharmaceuticals, Inc (the "Company") on Form 10-K for the year ended December 31, 2010, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joel A. Fernandes, Senior Director, Finance and Controller of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 24, 2011

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