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

FORM 10-Q

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

For the quarterly period ended March 31, 2012

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)	**(I.R.S. Employer Identification No.)**

170 Harbor Way, Suite 300, South San Francisco, CA 94080
(Address of principal executive offices, including zip code)

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

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 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.

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 ☒

On April 30, 2012, there were 54,499,799 shares of common stock, par value $0.001 per share, of Threshold Pharmaceuticals, Inc. outstanding.

Threshold Pharmaceuticals, Inc.

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FORM 10-Q
THREE MONTHS ENDED MARCH 31, 2012

The terms "Threshold," "we," "us," "the Company" and "our" as used in this report refer to Threshold Pharmaceuticals, Inc. Trademarks, trade names and service marks used in this report are the property of their respective owners.

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Threshold Pharmaceuticals, Inc.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)
(unaudited)

	March 31, 2012	December 31, 2011 (Note 1)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 25,935	$ 5,882
Marketable securities	23,796	14,408
Collaboration receivable	37,540	—
Prepaid expenses and other current assets	767	254
Total current assets	88,038	20,544
Property and equipment, net	617	543
Restricted cash and other assets	1,059	1,349
Total assets	$ 89,714	$ 22,436
LIABILITIES AND STOCKHOLDERS' EQUITY (NET CAPITAL DEFICIENCY)		
Current liabilities:		
Accounts payable	$ 1,307	$ 2,389
Accrued clinical and development expenses	4,703	4,465
Accrued liabilities	2,016	1,737
Deferred revenue, current	7,188	—
Total current liabilities	15,214	8,591
Warrant liability	101,625	9,209
Deferred revenue, non-current	50,060	—
Deferred rent	262	153
Total liabilities	167,161	17,953
Commitments and contingencies (Note 7)		
Stockholders' equity (net capital deficiency):		
Preferred stock, $0.001 par value, 2,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.001 par value, shares authorized: 150,000,000 shares; issued and outstanding: 54,101,725 shares at March 31, 2012 and 49,128,475 shares at December 31, 2011	54	49
Additional paid-in capital	290,159	256,563
Accumulated other comprehensive gain (loss)	1	(1)
Accumulated deficit	(367,661)	(252,128)
Total stockholders' equity (net capital deficiency)	(77,447)	4,483
Total liabilities and stockholders' equity (net capital deficiency)	$ 89,714	$ 22,436

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

Threshold Pharmaceuticals, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands, except per share data)
(unaudited)

	Three Months Ended March 31,	
	2012	2011
Revenue	$ 252	$ —
Operating expenses:		
Research and development	5,687	6,097
General and administrative	1,708	1,297
Total operating expenses	7,395	7,394
Loss from operations	(7,143)	(7,394)
Interest income, net	1	3
Interest and other expense	(108,391)	(939)
Net loss	(115,533)	(8,330)
Other comprehensive loss:		
Unrealized gain (loss) on available-for sale securities	2	(4)
Comprehensive loss	$(115,531)	$ (8,334)
Net loss per common share, basic and diluted	$ (2.30)	$ (0.23)
Weighted average number of shares used in per common share calculations: basic and diluted	50,326	36,445

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

Threshold Pharmaceuticals, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2012	2011
Cash flows from operating activities:		
Net loss	$(115,533)	$ (8,330)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	23	88
Stock-based compensation expense	398	249
Change in common stock warrant value	108,391	939
Changes in operating assets and liabilities:		
Collaboration receivable	(37,540)	—
Prepaid expenses and other assets	(223)	2
Accounts payable	(1,082)	352
Accrued clinical and development expenses	238	258
Accrued liabilities	279	508
Deferred rent	109	(71)
Deferred revenue	57,248	—
Net cash provided by (used in) operating activities	12,308	(6,005)
Cash flows from investing activities:		
Acquisition of property and equipment	(34)	—
Acquisition of marketable securities	(17,940)	(5,744)
Proceeds from sales and maturities of marketable securities	8,492	3,285
Net cash used in investing activities	(9,482)	(2,459)
Cash flows from financing activities:		
Proceeds from issuance of common stock and warrants, net of offering expenses	17,227	29,692
Net cash provided by financing activities	17,227	29,692
Net increase in cash and cash equivalents	20,053	21,228
Cash and cash equivalents, beginning of period	5,882	8,691
Cash and cash equivalents, end of period	$ 25,935	$29,919
Supplemental schedule of non-cash investing and financing activities		
Change in unrealized gain (loss) on marketable securities	$ 2	$ (4)

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

Threshold Pharmaceuticals, Inc.
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 — ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

Threshold Pharmaceuticals, Inc. (the "Company") is a biotechnology company focused on the discovery and development of drugs targeting the severe hypoxia in the microenvironment of solid tumors and patients with some hematological malignancies. The Company was incorporated in the State of Delaware on October 17, 2001. In June 2005, the Company formed a wholly-owned subsidiary, THLD Enterprises (UK), Limited in the United Kingdom for purposes of conducting clinical trials in Europe. There is currently no financial activity related to this entity.

On February 2, 2012, the Company entered into a global license and co-development agreement with Merck KGaA, of Darmstadt, Germany, to co-develop and commercialize TH-302, the Company's small molecule hypoxia-targeted drug. Under the terms of the agreement, Merck will receive co-development rights, exclusive global commercialization rights and will provide the Company an option to co-commercialize TH-302 in the United States. As a result of the agreement with Merck and the late development stage of TH-302, Threshold is no longer considered a Development Stage Company as of the first quarter of 2012. Threshold operates in one business segment.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the annual consolidated financial statements. In the opinion of management, all adjustments, consisting of normal recurring adjustments necessary for the fair statement of results for the periods presented, have been included. The results of operations of any interim period are not necessarily indicative of the results of operations for the full year or any other interim period.

The preparation of condensed consolidated financial statements requires management to make estimates and assumptions that affect the recorded amounts reported therein. A change in facts or circumstances surrounding the estimate could result in a change to estimates and impact future operating results.

The unaudited condensed consolidated financial statements and related disclosures have been prepared with the presumption that users of the interim unaudited condensed consolidated financial statements have read or have access to the audited consolidated financial statements for the preceding fiscal year. The condensed consolidated balance sheet at December 31, 2011 has been derived from the audited financial statements at that date but does not include all the information and footnotes required by accounting principles generally accepted in the United States of America. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto for the year ended December 31, 2011 included in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 15, 2012.

The unaudited condensed consolidated financial statements 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. The Company continues to incur substantial expenses related to research and development and management believes that it will continue to do so for the foreseeable future. On February 2, 2012, the Company entered into an agreement with Merck KGaA, which provided for an upfront payment of $25 million. The Company also earned a further $32.5 million in milestone payments during the quarter, $20 million of which was received subsequent to March 31, 2012 and the remaining $12.5 million is expected by the end of 2012. We could receive an additional $22.5 million in potential milestone payments that are independent of continued development of TH-302 in pancreatic cancer in 2012. See further details in Note 3 Collaboration Arrangements.

The Company expects to need to raise additional capital or incur indebtedness to fund new in-house development programs or to in-license or otherwise acquire and develop additional products or programs. 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 new in-house development programs or 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 terms acceptable to the Company.

Revenue Recognition

The Company recognizes revenue in accordance with ASC 605 "Revenue Recognition", subtopic ASC 605-25 "Revenue with Multiple Element Arrangements" and subtopic ASC 605-28 "Revenue Recognition-Milestone Method", which provides accounting guidance for revenue recognition for arrangements with multiple deliverables and guidance on defining the milestone and determining when the use of the milestone method of revenue recognition for research and development transactions is appropriate, respectively.

The Company's revenues are related to its collaboration arrangement with Merck KGaA, which was entered in February 2012. The collaboration with Merck provides for various types of payments to the Company, including non-refundable upfront license, milestone and royalty payments. The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable, and collectability is reasonably assured. The Company will also receive reimbursement for Merck's 70% share for eligible worldwide development expenses for TH-302. Such reimbursement is reflected as a reduction of operating expenses and not as revenue.

For multiple-element arrangements, each deliverable within a multiple deliverable revenue arrangement is accounted for as a separate unit of accounting if both of the following criteria are met: (1) the delivered item or items have value to the customer on a standalone basis and (2) for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in the Company's control. The deliverables under the Merck agreement have been determined to be a single unit of accounting and as such the revenue relating to this unit of accounting will be recorded as deferred revenue and recognized ratably over the term of its estimated performance period under the agreement, which is the product development period. The Company determines the estimated performance period and it will be periodically reviewed based on the progress of the related product development plan. The effect of a change made to an estimated performance period and therefore revenue recognized ratably would occur on a prospective basis in the period that the change was made.

Deferred revenue associated with a non-refundable payment received under a collaborative agreement for which the performance obligations are terminated will result in an immediate recognition of any remaining deferred revenue in the period that termination occurred provided that all performance obligations have been satisfied.

The Company recognizes revenue from milestone payments when: (i) the milestone event is substantive and its achievability has substantive uncertainty at the inception of the agreement, and (ii) the Company does not have ongoing performance obligations related to the achievement of the milestone earned. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment (a) is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from the Company's performance to achieve the milestone, (b) relates solely to past performance, and (c) is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement. See Note 3, "Collaboration Arrangements," for analysis of milestone events deemed to be substantive or non-substantive.

Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2011-04,*Financial Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs* ("ASU 2011-04"). ASU 2011-04 provides a consistent definition of fair value and aligns the fair value measurement and disclosure requirements between U.S. GAAP and International Financial Reporting Standards ("IFRS"). ASU 2011-04 clarifies the application of certain existing fair value measurement guidance and expands the disclosures for fair value measurements that are estimated using significant unobservable (Level 3) inputs. This ASU was effective in the Company's first quarter of 2012. The Company's adoption of ASU 2011-04 did not have a material impact on its consolidated financial statements.

In June 2011, the FASB issued Accounting Standards Update No. 2011-05,*Comprehensive Income (Topic 220): Presentation of Comprehensive Income.* ASU 2011-05 requires an entity to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. ASU 2011-05 eliminates the option to present other comprehensive income as part of the statement of stockholders' equity. This ASU was effective in the Company's first quarter of 2012 and the Company elected to present other comprehensive income in a single continuous statement.

NOTE 2 — NET LOSS PER COMMON SHARE

Basic net loss per common share is computed by dividing net loss 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 and warrants. A reconciliation of the numerator and denominator used in the calculation is as follows (in thousands, except per share amounts):

	Three Months Ended March 31,	
	2012	2011
Numerator:		
Net loss	$(115,533)	$ (8,330)
Denominator:		
Weighted average common shares outstanding	50,326	36,445
Basic and diluted net loss per share	$ (2.30)	$ (0.23)

The following outstanding warrants, options and purchase rights under the Company's 2004 Employee Stock Purchase Plan were excluded from the computation of diluted net loss per share for the periods presented because including them would have had an antidilutive effect (in thousands):

	As of March 31,	
	2012	2011
Shares issuable upon exercise of warrants	13,648	16,643
Shares issuable upon exercise of stock options	3,828	2,707
Shares issuable related to the ESPP	42	42

NOTE 3 — COLLABORATION ARRANGEMENTS

On February 2, 2012, the Company entered into a global license and co-development agreement with Merck KGaA, of Darmstadt, Germany, to co-develop and commercialize TH-302, the Company's small molecule hypoxia-targeted drug. Under the terms of the agreement, Merck will receive co-development rights, exclusive global commercialization rights and will provide the Company an option to co-commercialize TH-302 in the United States. The Company received an upfront payment of $25 million, of which $21 million was received during the quarter ended March 31, 2012 and $4 million was received subsequent to March 31, 2012. The Company also earned another $32.5 million in milestone payments, including a $20 million milestone payment based on positive results from its randomized Phase 2 trial in pancreatic cancer that the Company received subsequent to March 31, 2012 and the remaining $12.5 million is expected by the end of 2012. Neither of the milestones earned in the first quarter of 2012 were deemed to be substantive milestones because the work related to the achievement of these items was predominately completed prior to the inception of the arrangement. The Company is eligible to earn additional potential milestone payments of up to $152.5 million in regulatory and development milestones; including $22.5 million in 2012 that are independent of continued development of TH-302 in pancreatic cancer and $340 million in commercialization milestones.

In the United States, the Company will have primary responsibility for development of TH-302 in the soft tissue sarcoma indication. The Company and Merck KGaA will jointly develop TH-302 in all other cancer indications being pursued. Merck KGaA will pay 70% of worldwide development expenses for TH-302. Subject to FDA approval in the United States, Merck KGaA will initially be responsible for commercialization of TH-302 with the Company receiving a tiered, double-digit royalty on sales. Under the royalty-bearing portion of the agreement, Threshold retains the option to co-promote TH-302 in the United States. Additionally, the Company retains the option to co-commercialize TH-302, upon the achievement of certain sales and regulatory milestones, allowing the Company to participate in up to 50% of the profits in the United States depending on total sales. Outside of the United States, Merck KGaA will be solely responsible for the commercialization of TH-302 with the Company receiving a tiered, double-digit royalty on sales in these territories. The agreement became effective on March 12, 2012, upon termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976. The agreement will continue on a country-by-country basis until the later of the last to expire patent covering TH-302 in such country or ten years following the commercial launch of a product containing TH-302 in such country, unless terminated earlier. Merck has the right to terminate the agreement after the achievement of certain milestones, and each party has the right to terminate the agreement following an uncured material breach by the other party.

The Company's deliverables under the Merck agreement, which include delivery of the rights and license for TH-302 and performance of research and development activities, have been determined to be a single unit of accounting. The delivered license does not have standalone value at the inception of the arrangement due to the Company's proprietary expertise with respect to the licensed compound and related ongoing developmental participation under the global license and co-development agreement, which would be required for Merck to fully realize the value of the delivered license. Therefore, the revenue relating to this unit of accounting will be recorded as deferred revenue and recognized over the estimated performance period under the agreement, which is the product development period. The Company recorded the upfront payment and milestones earned as deferred revenue and is amortizing them ratably over its estimated period of performance. As a result, the Company recognized $0.3 million of revenue for the three months ended March 31, 2012. The Company will periodically review and, if necessary, revise the estimated periods of performance of our collaboration. The Company also earned a $1.1 million reimbursement for eligible worldwide development expenses for TH-302 from Merck during the three months ended March 31, 2012. Such earned reimbursement has been reflected as reduction of operating expenses and not as revenue.

Of the remaining potential future milestones, $152.5 million are related to development and regulatory milestones and $340 million are related to commercialization milestones that may be received under the Merck Agreement. Development milestones in the agreement include primarily the initiation of various phases of clinical trials. Regulatory milestones include the filing and acceptance of regulatory applications for marketing approval in major markets. Commercialization milestones include the achievement of first commercial sales in a particular market or annual product sales in excess of a pre-specified threshold. At the inception of the collaboration agreement the Company assessed development and regulatory milestones to be substantive where there was substantive scientific and regulatory uncertainty of achievement, the amounts of payments assigned were considered to be commensurate with the enhancement of the value of the delivered rights and license of TH-302 and the Company's performance is necessary to the achievement of the milestone. Accordingly, the Company will recognize payments related to the achievement of such milestones, if any, when such milestone is achieved. Development and regulatory milestones that do not meet these conditions were considered non-substantive and payments related to the achievement of such milestones, if any, will be recorded as deferred revenue and amortized ratably over the estimate period of performance. Final determination of whether a development or regulatory milestone is substantive will depend upon the Company's role in achieving the milestone. The specific roles and responsibilities related to the development and regulatory activities for certain of these milestones have yet to be determined and may change during the development period. Under the Merck agreement, Merck will initially be responsible for commercialization activities and the Company initially may not be involved in the achievement of these commercial milestones. These commercial milestones would typically be achieved after the completion of the Company's development and regulatory activities. The Company would account for the commercial milestones in the same manner as royalties, with revenue recognized upon achievement of the milestone.

NOTE 4 — STOCKHOLDERS' EQUITY

Common Stock

Pursuant to an amendment to the at the market issuance sales agreement and a prospectus supplement the Company filed on January 20, 2012 and pursuant to a new registration statement filed with the Securities and Exchange Commission, the Company may sell shares of its common stock having an aggregate offering price of up to $15.0 million from time to time through MLV & Co., LLC, formerly McNicoll, Lewis & Vlak LLC as its sales agent. During the three months ended March 31, 2012, the Company sold 2,022,144 shares of our common stock at an average price of $6.29 pursuant to the at market issuance sales agreement. Net proceeds from the sale of stock were $12.3 million. The sale of stock did not result in an adjustment to the exercise price of certain of our outstanding warrants.

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 comprehensive loss.

During the three months ended March 31, 2012, warrants to purchase 2,995,196 shares of common stock were exercised for net proceeds of approximately $4.6 million. Upon the exercise of the warrants, the Company transferred the fair value of the warrants of approximately $16.0 million from warrant liability into stockholders' equity.

At March 31, 2012 and December 31, 2011, the Company had warrants outstanding to purchase 3,529,398 and 3,588,221 shares of common stock, respectively, from the August 2008 offering. The fair value of these warrants on March 31, 2012 and December 31, 2011 was determined using a Black-Scholes valuation model with the following level 3 inputs:

	March 31, 2012	December 31, 2011
Risk-free interest rate	0.33%	0.25%
Expected life (in years)	1.41	1.66
Dividend yield	—	—
Volatility	117%	84%
Stock price	$ 8.80	$ 1.22

During the three months ended March 31, 2012, the change in fair value of $24.7 million related to the August 2008 warrants was recorded as other expense in the Company's consolidated statement of comprehensive loss.

At March 31, 2012 and December 31 2011, the Company had warrants outstanding to purchase 4,821,969 and 7,329,819 shares of common stock, respectively from the October 2009 offering. The fair value of these warrants on March 31, 2012 and December 31, 2011 was determined using a Black Scholes valuation model with the following level 3 inputs:

	March 31, 2012	December 31, 2011
Risk-free interest rate	0.51%	0.36%
Expected life (in years)	2.52	2.76
Dividend yield	—	—
Volatility	103%	88%
Stock price	$ 8.80	$ 1.22

During the three months March 31, 2012 the change in fair value of $44.5 million related to the October 2009 warrants was recorded as other expense in the Company's consolidated statement of comprehensive loss.

At March 31, 2012 and December 31, 2011, the Company had warrants outstanding to purchase 5,296,704 and 5,725,227 shares of common stock, respectively from the March 2011 offering. The fair value of these warrants on March 31, 2012 and December 31, 2011was determined using a Black Scholes valuation model with the following level 3 inputs:

	March 31, 2012	December 31, 2011
Risk-free interest rate	1.04%	0.60%
Expected life (in years)	3.96	4.21
Dividend yield	—	—
Volatility	110%	102%
Stock price	$ 8.80	$ 1.22

During the three months ended March 31, 2012, the change in fair value of $39.2 million related to the March 2011 warrants was recorded as other expense in the Company's consolidated statement of comprehensive loss.

The following table sets forth the Company's financial liabilities, related to warrants issued in the August 2008, October 2009 and March 2011offerings, subject to fair value measurements as of March 31, 2012:

(in thousands)	Fair Value as of March 31, 2012	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Common stock warrants	$ 101,625	$ —	$ —	$ 101,625

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, 2011	$ 9,209
Change in fair value of common stock warrants during three months ended March 31, 2012	108,391
Exercise of warrants during three months ended March 31, 2012	(15,975)
Balance at March 31, 2012	$ 101,625

NOTE 5 — STOCK BASED COMPENSATION

The Company recognizes stock-based compensation in accordance with ASC 718, *"Compensation—Stock Compensation."* Stock-based compensation expense recognized in the unaudited condensed consolidated statement of comprehensive loss related to stock options and ESPP was $0.4 million and $0.2 million for the three months ended March 31, 2012 and 2011, 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 three months ended March 31, 2012 and 2011:

	Three Months Ended March 31,	
	2012	2011
Employee Stock Options:		
Risk-free interest rate	1.16%	2.73%
Expected term (in years)	6.08	6.08
Dividend yield	—	—
Volatility	105%	87%
Weighted-average fair value of stock options granted	$ 2.52	$ 1.29
Employee Stock Purchase Plan (ESPP):		
Risk-free interest rate	0.20%	0.48%
Expected term (in years)	1.25	1.25
Dividend yield	—	—
Volatility	111%	79%
Weighted-average fair value of ESPP purchase rights	$ 2.04	$ 0.84

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 awards assumes no dividends as the Company does not anticipate paying cash dividends on its common stock.

Employee Stock-based Compensation Expense

As required by ASC 718, the Company recognized $0.3 million and $0.2 million of stock-based compensation expense related to stock options and purchase rights granted after the Company's initial public offering in February 2005, under the Company's stock option plans and ESPP, for the three months ended March 31, 2012 and 2011, respectively. As of March 31, 2012, the total unrecognized compensation cost related to unvested stock-based awards granted to employees under the Company's stock option plans was approximately $2.7 million before forfeitures. This cost will be recorded as compensation expense on a straight-line basis over the remaining weighted average requisite service period of approximately 2.7 years.

Non-employee Stock-based Compensation Expense

The Company accounts for equity instruments issued to non-employees in accordance with ASC 505,*"Equity."* The equity instruments consisting of stock options are valued using the Black-Scholes option pricing model. The values attributable to these options are amortized over the service period and the unvested portion of these options is remeasured at each vesting date. In connection with the grant of stock options to non-employees, the Company recorded stock-based compensation of approximately $0.1 million and $20,000 for the three months ended March 31, 2012 and 2011, respectively.

Stock-based compensation expense, which consists of the compensation cost for employee stock options and ESPP, and the value of options issued to non-employees for services rendered, was allocated to research and development and general and administrative as follows (in thousands):

	Three Months Ended March 31,	
	2012	2011
Research and development	$ 240	$ 99
General and administrative	158	150
	$ 398	$ 249

Equity Incentive Plans

2004 Equity Incentive Plan On January 1, 2012, an additional 1,250,000 shares was authorized for issuance under the 2004 Equity Incentive Plan ("2004 Incentive Plan"), pursuant to the annual automatic increase to the authorized shares under the 2004 Incentive Plan. At March 31, 2012, 1,989,784 shares were authorized and available for issuance under the 2004 Equity Incentive Plan.

The following table summarizes stock option activity under the Company's 2004 Equity Incentive Plan:

Options	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2011	3,672,179	$ 1.45	—	—
Granted	338,000	$ 3.20	—	—
Exercised	(182,323)	$ 1.25	—	—
Forfeitures	—	$ —	—	—
Outstanding at March 31, 2012	3,827,856	$ 1.61	8.19	$27,510,412
Vested and expected to vest March 31, 2012	3,788,219	$ 1.61	8.18	$27,240,451
Exercisable at March 31, 2012	1,730,139	$ 1.39	7.39	$12,817,473

The total intrinsic value of stock options exercised during the three months ended March 31, 2012 and 2011 were $0.4 million and $3,000, respectively, as determined at the date of the option exercise. Cash received from stock option exercises was $0.2 million and $8,000 for each of the three months ended March 31, 2012 and 2011, 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 the Company's current loss position.

2004 Employee Stock Purchase Plan On January 1, 2012, an additional 100,000 shares was authorized for issuance under the 2004 Employee Stock Purchase Plan ("2004 Purchase Plan") pursuant to the annual automatic increase to the authorized shares under the 2004 Purchase Plan. For the three months ended March 31, 2012, plan participants had purchased 68,651 shares at an average purchase price of $1.15. At March 31, 2012, plan participants had $50,000 withheld to purchase stock on August 14, 2012, which is included in accrued liabilities on the accompanying unaudited condensed consolidated balance sheet. At March 31, 2012, 385,167 shares were authorized and available for issuance under the ESPP.

NOTE 6 — 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 and liabilities. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. The following table sets forth the Company's financial assets (cash equivalents and marketable securities) at fair value on a recurring basis as of March 31, 2012 and December 31, 2011:

(in thousands)	Fair Value as of March 31, 2012	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Money market funds	$ 23,035	$23,035	$ —	$ —
Corporate bonds	911	—	911	—
U.S. Government securities	20,537	—	20,537	—
Commercial paper	5,248	—	5,248	—
Total cash equivalents and marketable securities	$ 49,731	$23,035	$26,696	$ —

(in thousands)	Fair Value as of December 31, 2011	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Money market funds	$ 4,050	$4,050	$ —	$ —
Corporate bonds	4,690	—	4,690	—
Government securities	5,970	—	5,970	—
Commercial paper	5,548	—	5,548	—
Total cash equivalents and marketable securities	$ 20,258	$4,050	$ 16,208	$ —

The Company invests in highly-liquid, investment-grade securities. The following is a summary of the Company's available-for-sale securities at March 31, 2012 and December 31, 2011:

As of March 31, 2012 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	$ 23,035	$ —	$ —	$ 23,035
Corporate bonds	911	—	—	911
U.S. Government securities	20,536	2	(1)	20,537
Commercial paper	5,248	—	—	5,248
	49,730	2	(1)	49,731
Less cash equivalents	(25,935)	—	—	(25,935)
Total marketable securities	$ 23,795	$ 2	$ (1)	$ 23,796

As of December 31, 2011 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	$ 4,050	$ —	$ —	$ 4,050
Corporate bonds	4,693	—	(3)	4,690
Government securities	5,968	2	—	5,970
Commercial paper	5,548	—	—	5,548
	20,259	2	(3)	20,258
Less cash equivalents	(5,850)	—	—	(5,850)
Total marketable securities	$14,409	$ 2	$ (3)	$14,408

There were no realized gains or losses in the three months ended March 31, 2012 and 2011.

As of March 31, 2012, weighted average days to maturity for the Company's available for sale securities was 97 days, with the longest maturity being June 2013.

The following table provides the breakdown of the marketable securities with unrealized losses at March 31, 2011 (in thousands):

	In loss position for less than twelve months	
As of March 31, 2012 (in thousands):	Fair Value	Unrealized Loss
U.S. Government securities	$ 7,594	$ (1)

The Company determined the fair value of the liability associated with its warrants to purchase 13.6 million shares of outstanding common stock using a Black-Scholes Model. See detailed discussion in Note 4 — Stockholders' Equity.

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. 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,	
2012	$ 584
2013	624
2014	641
2015	663
2016	691
2017	235
Total	$3,438

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 duration of these indemnification agreements is 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. Accordingly, the Company has not recognized any liabilities relating to these agreements as of March 31, 2012.

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.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the "Risk Factors" section of this Quarterly Report on Form 10-Q. Other than statements of historical fact, statements made in this Quarterly Report on Form 10-Q are forward-looking statements within the meaning of Section 21E of the Exchange Act, and Section 27A of the Act . When used in this report or elsewhere by management from time to time, the words "believe," "anticipate," "intend," "plan," "estimate," "expect," and similar expressions are forward-looking statements. Such forward-looking statements are based on current expectations. Forward-looking statements made in this report include, for example, statements about:

- the progress of our clinical programs, including estimated milestones;
- estimates of future performance, capital requirements and needs for financing;
- uncertainties associated with obtaining and enforcing patents and other intellectual property rights; and
- the costs and timing of obtaining drug supply for our pre-clinical and clinical activities.

Forward-looking statements are not guarantees of future performance and involve risks and uncertainties. Actual events or results may differ materially from those discussed in the forward-looking statements as a result of various factors. For a more detailed discussion of the potential risks and uncertainties that may impact their accuracy, see the "Overview" section of this Management's Discussion and Analysis of Financial Condition and Results of Operations and the "Risk Factors" section in Part II of this quarterly report on Form 10-Q. Forward-looking statements reflect our view only as of the date of this report. We undertake no obligation to update any forward-looking statements. You should also review carefully the cautionary statements and risk factors listed in our Annual Report on Form 10-K for the year ended December 31, 2011, and in our other filings with the SEC, including our Forms 10-Q and 8-K and our Annual Report to Shareholders.

Overview

We are a biotechnology company focused on the discovery and development of drugs targeting the microenvironment of solid tumors and the bone marrows of patients with some hematologic malignancies (blood cancers) as novel treatments for patients living with cancer. The microenvironment of these tissues is characterized by, among other things, hypoxia or lack of oxygen. 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 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 entered a license and co-development agreement with Merck KGaA for worldwide development and commercialization. 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 and the bone marrows of patients with some hematologic malignancies.

TH-302 is currently in Phase 1, Phase 2 and Phase 3 clinical trials. The development plan for TH-302 is designed to investigate the efficacy and safety across a broad range of solid tumors and hematologic malignancies. We reported updated top-line results from the initial Phase 1 monotherapy trial of TH-302 (401 trial) including indication specific data in patients with metastatic melanoma and small-cell lung cancer (SCLC). We have also reported results from each of four Phase 1/2 combination therapy investigations of a chemotherapy agent plus TH-302 in solid tumors involving combining TH-302 with doxorubicin, gemcitabine, docetaxel and pemetrexed. We have also reported results from our clinical study of TH-302 in patients with advanced leukemias (407 trial) and initiated a clinical study of TH-302 in patients with multiple myeloma (408 trial). In addition, investigations have been initiated to explore the combination of TH-302 with anti-angiogenic therapies including a Phase 1/2 dose escalation clinical trial of TH-302 in combination with sunitinib (Sutent ®) in patients with advanced renal cell carcinoma or gastrointestinal stromal tumors (410 trial) and physician initiated clinical trial of TH-302 administered either in combination with bevacizumab (Avastin ®) in patients with recurrent high grade astrocytoma including glioblastoma or in combination with pazopanib (Votrient ®) in patients with solid tumors.

In February of 2012 we reported top-line results from the randomized and controlled Phase 2 trial of TH-302 plus gemcitabine in patients with pancreatic cancer (404 trial). The median progression-free survival (PFS) was 5.6 months for patients treated with gemcitabine in combination with TH-302 at 240 mg/m2 and 340 mg/m2 compared to 3.6 months for patients treated with gemcitabine alone. The PFS hazard ratio comparing the TH-302 combination to gemcitabine alone was 0.61 (95% confidence interval: 0.43—0.87) which was highly statistically significant ($p = 0.005$) and represented a 63% improvement in PFS. The response rate in the combination arms was 22% compared to 12% in the gemcitabine alone group. Results also demonstrated greater efficacy in the higher TH-302 dose group compared to the lower dose group. The combination was well tolerated with a safety profile that was consistent with our prior study of this combination regimen. As in that study, skin and mucosal toxicities related to TH-302 were dose dependent but not dose limiting. In April 2012, we provided detailed results from our 404 trial at the American Association of Cancer Research (AACR) annual meeting including results for each of the 240 mg/m2 and 340 mg/m2 TH-302 combination arms. The median PFS was 6.0 months in the 340 mg/m2 group. The response rate was 27% in the 340 mg/m2 group. A similar dose dependency was reported in serum CA19-9 levels. There was greater drug exposure in the combination groups with a median of 4 cycles received with gemcitabine alone compared with 5 cycles in the 240 mg/m2 group and 6 cycles in the 340 mg/m2 group. The combination safety profile was consistent with the prior study of this combination regimen. As in that study, skin and mucosal toxicities and were less than what has been seen at the single-agent maximum tolerated dose of TH-302, which was previously established at 575 mg/m2. The incidence of grade 3/4 thrombocytopenia and grade 3/4 neutropenia was significantly higher in the combination arms and highest in the 340 mg/m2 group. Discontinuations for adverse events were lowest in the 340 mg/m2 group. We expect to provide detailed updated top-line results, including mature data on overall survival in the second half of 2012.

During 2011, we presented updated top-line results from our Phase 1/2 combination therapy in patients with soft tissue sarcoma treated with doxorubicin plus TH-302 at the maximum tolerated dose of 300 mg/m 2 (403 trial). In February 2011, we reached agreement with the FDA on the design and planned analysis of a pivotal Phase 3 trial in patients with soft tissue sarcoma (406 trial). As part of the Special Protocol Assessment (SPA) submission, the FDA agreed that the design and planned analysis of the proposed Phase 3 trial adequately addresses the objectives necessary to support a regulatory submission. We initiated the pivotal Phase 3 trial in September of 2011 and expect to provide an update on the interim analysis which will be conducted by an Independent Data Monitoring Committee (IDMC) in the beginning of 2013.

We are working to broaden the applicability of TH-302 to other cancers and in combination with other approved anti-cancer drugs as well as to discover additional hypoxia activated prodrugs that will selectively target cancer cells.

We were 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 commercial sales 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. During the quarter ended March 31, 2012, we sold 2,022,144 shares of common stock under our at market issuance sales facility for net proceeds of $12.3 million, and we received approximately $4.6 million from the exercise of warrants to purchase common stock. On February 3, 2012, we entered into an agreement with Merck KGaA, which provided for an upfront payment of $25 million. We also earned an additional $32.5 million in milestone payments, $20 million of which we have received subsequent to March 31, 2012 and the remaining $12.5 million is expected by the end of the 2012. We could receive an additional $22.5 million in potential milestone payments that are independent of continued development of TH-302 in pancreatic cancer in 2012. As of March 31, 2012 we had cash, cash equivalents and marketable securities of $49.7 million.

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 2012 compared to 2011 due to the continued execution of existing clinical trials and beginning of new clinical trials. We believe that our cash, cash equivalents and marketable securities will be sufficient to fund our projected operating requirements for at least the next twelve months based upon current operating plans, milestone payment forecasts and spending assumptions. We expect that we will need to raise additional capital to support new in-house development programs or to in-license or otherwise acquire and develop additional products or programs. We intend to seek funds through additional arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently. Research and development expenses may fluctuate significantly from period to period as a result of the progress and results of our clinical trials.

Results of Operations

Revenue. We recognized a total of $0.3 million in the three months ended March 31, 2012 from the amortization of the $25 million upfront payment received and $32.5 million milestone payments earned payments, including a $20 million milestone payment based on positive results from its randomized Phase 2 trial in pancreatic cancer, from our collaboration with Merck. We are amortizing the upfront payment and milestones earned over the period of performance (product development period). We will periodically review and, if necessary, revise the estimated periods of performance of our collaboration. No revenue was recognized for the three months ended March 31, 2011.

Research and Development. Research and development expenses were $5.7 million for the three months ended March 31, 2012 compared to $6.1 million for the three months ended March 31, 2011. The $0.4 million decrease in expenses is due primarily to a $1.1 million reimbursement for Merck's 70% share of development expenses for TH-302, partially offset by $0.4 million increase in clinical development expenses and increase of $0.2 million in consulting and employee related expenses.

Research and development expenses by project (in thousands)	Three months ended March 31,	
	2012	2011
TH-302	$4,748	$ 5,119
Discovery research	947	978
Total research and development expenses	$5,695	$ 6,097

Research and development expenses associated with our internally discovered compound TH-302 were $4.7 million for the three months ended March 31, 2012 and $5.1 million for the three months ended March 31, 2011. TH-302 continues to progress through the 406 trial, the 404 trial and the 403 trial. We reported top-line results for the 404 trial in February 2012 and detailed results in April 2012. We expect to provide additional overall survival data on the 404 trial in the second half of 2012.

Discovery research and development expenses were $0.9 million for the three months ended March 31, 2012 compared to $1.0 million for the three months ended March 31, 2011. We continue to focus our efforts towards discovering and developing new drug candidates from our hypoxia activated prodrug platform.

We did not track research and development expenses by project prior to 2003, and therefore we cannot provide cumulative project expenses to date. Due to the risks and uncertainties involved in discovering and developing product candidates, such as clinical trial results, regulatory approval requirements, dependence on third parties and market acceptance, which are described in the "Risk Factors" section in Part II of this Quarterly Report on Form 10-Q, we cannot reasonably estimate the costs and timing of completion of each project or when any project will result in net cash inflows.

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 under our collaboration with Merck as well as on our own. Research and development expenses are expected to increase in 2012 compared to 2011 due to the continued execution of existing clinical trials and start of new clinical trials.

General and Administrative. General and administrative expenses were $1.7 million for the three months ended March 31, 2012, compared to $1.3 million for the three months ended March 31, 2011. The $0.4 million increase in expenses is due primarily to an increase in consulting expenses related to our collaboration with Merck KGaA. We currently expect our general and administrative expenses to increase in 2012 compared to 2011 due to increased staffing and consulting expenses to support our collaboration with Merck KGaA and the continued development of TH-302.

Interest Income (Expense), Net

Interest income (expense), net for the three months ended March 31, 2012 was $1,000 of interest income compared to $3,000 of interest income for 2011.

Other Income (Expense)

Other income (expense) for the three months ended March 31, 2012 was non-cash expense of $108.4 million compared to non-cash expense of $0.9 million, for the three months ended March 31, 2011. The increase in non-cash expense was due to an increase of $108.4 million in the fair value of outstanding warrants to purchase common stock as well as warrants exercised during the three months ended March 31, 2012. 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 comprehensive loss.

Liquidity and Capital Resources

We have not generated and do not expect to generate revenue from sales of product candidates in the near term. Since our inception we funded our operations primarily through private placements and public offerings of equity securities. During the quarter ended March 31, 2012, we sold an aggregate of 2,022,144 shares of common stock under our at market issuance sales facility for net proceeds of $12.3 million, and we received approximately $4.6 million from the exercise of warrants to purchase common stock.

On February 3, 2012, we entered into an agreement with Merck KGaA, which provided for an upfront payment of $25 million, of which $21 million was received during the quarter ended March 31, 2012 and $4 million was received subsequent to March 31, 2012. We also earned a further $32.5 million in milestone payments, $20 million of which we received subsequent to March 31, 2012 and the remaining $12.5 million is expected by the end of 2012. We could receive an additional $22.5 million in potential milestone payments that are independent of continued development of TH-302 in pancreatic cancer in 2012. We had cash, cash equivalents and marketable securities of $49.7 million and $20.3 million at March 31, 2012 and December 31, 2011, respectively, available to fund operations.

Net cash provided by operating activities for the three months ended March 31, 2012 was $12.3 million compared to $6.0 in net cash used in operating activities for the three months ended March 31, 2011. The increase of $18.3 million in cash provided by operations was primarily attributable to $21 million of cash received related to an upfront payment from the Merck collaboration during the three months ended March 31, 2012.

Net cash used in investing activities for the three months ended March 31, 2012 was $9.5 million compared with net cash used in investing activities of $2.5 million for the three months ended March 31, 2011. The $7.0 million increase in cash used by investing activities was due primarily to the excess of proceeds used in the purchase of marketable securities over proceeds from the sales and maturities of marketable securities.

Net cash provided by financing activities for the three months ended March 31, 2012 and 2011 was $17.2 and $29.7 million, respectively. The $12.5 million decrease in cash provided by financing activities was primarily due to the approximately $27.8 million of net proceeds from our March 2011 registered direct offering as compared to the $17.2 million received during 2012 primarily as a result of our issuance of common stock under the at the market sales facility and the exercise of warrants to purchase shares of common stock.

Obligations and Commitments

We lease certain of our facilities under noncancelable leases, which qualify for operating lease accounting treatment under ASC 840,*"Leases,"* and, as such, these facilities are not included on our unaudited condensed consolidated balance sheets.

During the three months ended March 31, 2012, there have been no significant changes in our payments due under contractual obligations and commitments, as disclosed in our Annual Report on Form 10-K for the year ended December 31, 2011, which we filed with Securities and Exchange Commission ("SEC") on March 15, 2012.

At Market Sales Facility

On October 29, 2010, we entered into an at market issuance sales agreement, or sales agreement, with MLV & Co., LLC, formerly McNicoll, Lewis & Vlak LLC ("MLV"), pursuant to which we were able to 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. For the year ended December 31, 2011, we sold an aggregate of 971,037 shares of our common stock at an average price of $2.66 pursuant to the sales agreement. Net proceeds from the sale of stock in 2011 were $2.3 million. The sales of the stock did not result in an adjustment to the exercise price of certain of our outstanding warrants. Pursuant to an amendment to the at the market issuance sales agreement and a prospectus supplement we filed on January 20, 2012 and pursuant to a new registration statement filed with the Securities and Exchange Commission, we may 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 on the terms and conditions described above. During the three months ended March 31, 2012, we sold 2,022,144 shares of our common stock at an average price of $6.29 pursuant to the sales agreement. Net proceeds from the sale of stock were $12.3 million. The sale of stock did not result in an adjustment to the exercise price of certain of our outstanding warrants.

We believe that our cash, cash equivalents and marketable securities will be sufficient to fund our projected operating requirements for at least the next twelve months based upon current operating plans, milestone payment forecasts and spending assumptions. We expect that we will need to raise additional capital to in-license or otherwise acquire and develop additional products or programs. We intend to seek funds through additional arrangements with collaborators or others that may require us to relinquish rights to certain product candidates that we might otherwise seek to develop or commercialize independently.

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 new in-house development programs or 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. 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.

Critical Accounting Policies and Use of Estimates

Our discussion and analysis of our financial condition and results of operations are based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information. The preparation of these unaudited condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses based on historical experience and on various assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. For further information on our critical accounting policies, see the discussion of critical accounting policies in our Annual Report on Form 10-K for the year ended December 31, 2011, which we filed with the SEC on March 15, 2012. There has been one material revision to the critical accounting policies as discussed in our Annual Report on Form 10-K for the year ended December 31, 2011 for the adoption of revenue recognition as a result of our entering into the collaboration with Merck in February 2012.

Revenue Recognition

We recognize revenue in accordance with ASC 605 “Revenue Recognition”, subtopic ASC 605-25 “Revenue with Multiple Element Arrangements” and subtopic ASC 605-28 “Revenue Recognition-Milestone Method”, which provides accounting guidance for revenue recognition for arrangements with multiple deliverables and guidance on defining the milestone and determining when the use of the milestone method of revenue recognition for research and development transactions is appropriate, respectively.

Our revenues are related to our collaboration arrangement with Merck KGaA, which was entered in February 2012. Our collaboration with Merck provides for various types of payments to us, including non-refundable upfront license, milestone and royalty payments. We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable, and collectability is reasonably assured. We will also receive reimbursement for Merck's 70% share for eligible worldwide development expenses for TH-302. Such reimbursement would be reflected as a reduction of operating expenses and not as revenue.

For multiple-element arrangements, each deliverable within a multiple deliverable revenue arrangement is accounted for as a separate unit of accounting if both of the following criteria are met: (1) the delivered item or items have value to the customer on a standalone basis and (2) for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control. The deliverables under the Merck agreement have been determined to be a single unit of accounting and as such the revenue relating to this unit of accounting will be recorded as deferred revenue and recognized ratably over the term of its estimated performance period under the agreement, which is the product development period We determine the estimated performance periods, and they will be periodically reviewed based on the progress of the related product development plan. The effect of a change made to an estimated performance period and therefore revenue recognized ratably would occur on a prospective basis in the period that the change was made.

Deferred revenue associated with a non-refundable payment received under a collaborative agreement for which the performance obligations are terminated will result in an immediate recognition of any remaining deferred revenue in the period that termination occurred provided that all performance obligations have been satisfied.

We recognize revenue from milestone payments when: (i) the milestone event is substantive and its achievability has substantive uncertainty at the inception of the agreement, and (ii) we do not have ongoing performance obligations related to the achievement of the milestone earned. Milestone payments are considered substantive if all of the following conditions are met: the milestone payment (a) is commensurate with either our performance to achieve the milestone or the enhancement of the value of the delivered item or items as a result of a specific outcome resulting from our performance to achieve the milestone, (b) relates solely to past performance, and (c) is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement. See Note 3, "Collaboration Arrangements," in the Notes to the Consolidated Financial Statements included in part I, , Item 1. "Financial Information " on this Quarterly Report on Form 10-Q, for analysis of each milestone event deemed to be substantive or non-substantive.

Determining whether and when some of these revenue recognition criteria have been satisfied often involves assumptions and judgments that can have a significant impact on the timing and amount of revenue we report. Changes in assumptions or judgments or changes to the elements in an arrangement could cause a material increase or decrease in the amount of revenue that we report in a particular period.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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. Nevertheless, 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 trials 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 4. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures.

Based on their evaluation as of March 31, 2012, our chief executive officer and vice president, finance and controller have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) of the Securities Exchange Act of 1934, as amended) were effective at the reasonable assurance level to ensure that the information required to be disclosed by us in reports we are required to file under the Exchange Act was recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and Form 10-Q and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosures.

Changes in internal controls over financial reporting.

There were no changes in our internal control over financial reporting during the three months ended March 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the effectiveness of controls.

Our management, including our chief executive officer and vice president, 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 benefits 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. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the control.

The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and we cannot be certain that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met and, as set forth above, our chief executive officer and vice president, finance and controller have concluded, based on their evaluation, that our disclosure controls and procedures were sufficiently effective as of March 31, 2012 to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None

ITEM 1A. RISK FACTORS

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.

We are dependent upon our collaborative relationship with Merck KGaA to further develop, manufacture and commercializeTH-302.

Our success in developing, manufacturing and commercializing TH-302 will depend on our relationship with Merck KGaA. On February 2, 2012, we entered into a global license and co-development agreement with Merck KGaA to co-develop and commercialize TH-302. In the United States, Threshold will have primary responsibility for development of TH-302 in the soft tissue sarcoma indication. Threshold and Merck KGaA will jointly develop TH-302 in all other cancer indications being pursued. Threshold has rights to co-promote TH-302 in the United States, which it can exercise by giving notice during specified periods, and has the right to co-commercialize TH-302 if certain development or sales milestones are achieved.

We are subject to a number of risks associated with our dependence on our collaborative relationship with Merck, including:

- our ability, together with Merck, to achieve developmental and commercial milestones that will trigger payments to Threshold under the agreement;
- our ability to fund thirty percent (30%) of the global development expenses of TH-302;
- decisions by Merck regarding the amount and timing of resource expenditures for the development and commercialization of TH-302;
- possible disagreements with Merck as to development plans, clinical trials, regulatory marketing or sales;
- our need to develop a sales force to co-promote or co-commercialize TH-302 in the United States if we chose to do so, or our reliance on Merck to promote TH-302 in the United States;
- our inability to co-promote or co-commercialize TH-302 in any country outside the United States, which makes us solely dependent on Merck to promote and commercialize TH-302 in foreign countries;
- Merck's right to terminate the collaboration agreement on limited notice after the attainment of certain milestones or in certain circumstances involving our insolvency or material breach of the agreement;
- loss of significant rights if we fail to meet our obligations under the collaboration agreement;
- adverse regulatory or legal action against Merck resulting from failure to meet healthcare industry compliance requirements in the promotion and sale of TH-302, including federal and state reporting requirements;
- changes in key management personnel at Merck, including Merck's representatives on the joint steering committee or other committees that are administering the agreement; and
- possible disagreements with Merck regarding interpretation or enforcement of the agreement.

We have limited ability to direct Merck in its development of TH-302 and we may be unable to obtain any remedy against Merck if they fail to do so, or do so in a manner that we think is inadequate. Merck may not have sufficient expertise to develop, promote or obtain reimbursement for oncology products in the United States and may fail to devote appropriate resources to this task. In addition, Merck may establish a sales and marketing infrastructure for TH-302 that is too large and expensive in view of the magnitude of the sales opportunity or establish this infrastructure too early in view of the ultimate timing of potential regulatory approvals. We are at risk with respect to the success or failure of Merck's development and commercial decisions related to TH-302 as well as the extent to which Merck succeeds in the execution of its strategy. Merck's development of other products may affect its incentives to develop and commercialize TH-302 and cause it to take actions that may be different from those we would take.

Under the terms of the agreement, we and Merck must agree on the development plan for TH-302. If we and Merck cannot agree, clinical trial progress could be significantly delayed. Further, if we cease funding development of TH-302 under the collaboration agreement, then we will be entitled to receive a royalty, but will lose our right to co-commercialize TH-302 and share in profits.

Merck has the right to terminate the agreement after certain milestones have been met on ninety (90) days prior written notice, or following our uncured material breach. If Merck terminates the agreement, then we shall become responsible for the costs of development and commercialization of TH-302, and there can be no assurance we would be able to do so, or to find another collaborator for the continued development and commercialization of TH-302.

If we are unable to maintain our collaborative relationship with Merck, we may be unable to continue development, manufacturing and marketing activities at our own expense. If we were able to do so on our own, this would significantly increase our capital and infrastructure requirements, would necessarily impose delays on development programs, may limit the indications we are able to pursue and could prevent us from effectively developing and commercializing TH-302.

Disputes with Merck may delay or prevent us from further developing, manufacturing or commercializingTH-302, and could lead to litigation against Merck, which could be time consuming and expensive.

Delays in our clinical trials could result in us not achieving anticipated developmental milestones when expected, increased costs and delay our ability to obtain regulatory approval and commercialize our product candidates.

Delays in our clinical trial enrollment or in the progression of our clinical trials could result in us not meeting previously announced clinical milestones and could materially impact our product development costs and milestone revenue and delay regulatory approval of our product candidates. We do not know whether planned clinical trials 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;
- a lower than expected frequency of clinical trial events;
- delays in obtaining clinical materials;
- slower than expected patient recruitment to participate in clinical trials;
- delays in reaching agreement on acceptable clinical trial agreement terms with prospective sites or obtaining institutional review board approval,
- delays in obtaining regulatory approval to commence new trials; and
- disagreements with Merck KGaA on development plans.

If we do not successfully complete our clinical trials on schedule, the price of our common stock may decline.

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 an agreement with the Food and Drug Administration, or FDA, following 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 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, including Phase 2 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 and hematological malignancies, which currently is an unproven approach to therapeutic intervention.

Our product candidates are designed to target the microenvironment of solid tumors and hematological malignancies by, in the case of TH-302, harnessing hypoxia for selective toxin activation. We have not, nor to our knowledge has any other company, received regulatory approval for a drug based on this approach. We cannot be certain that our approach 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.

We have not yet gained sufficient experience with a commercial formulation of TH-302.

The formulation of TH-302 that we are using in our clinical trials was recently changed to address issues with a prior formulation that was subject to storage and handling requirements that were not be suitable for commercial product. The new formulation of TH-302 may be suitable for commercial product, but additional data will be required to verify this. There can be no assurance that it will be. If we are not able to develop a commercial formulation, we may delay registration 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 receive 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 or Merck KGaA fail to comply with continuing United States and foreign regulations, we or they 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 and Merck KGaA 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 used 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. Manufacturers of our products, if approved, will be subject to ongoing FDA requirements for submission of safety and other post-market information. If such 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;
- seize or detain products or require a product recall, or
- revise or restrict labeling and promotion.

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.

We do not have a sales force and may not develop an effective one.

Our license and co-development agreement with Merck KGaA gives us the right, under certain circumstances, to co-promote or co-commercialize TH-302. We have no sales experience, and developing a sales force will require substantial expenditures. We may not be able to effectively recruit, train or retain sales personnel. We may not be able to effectively sell TH-302, if approved, and if we exercise our rights to do so, 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 commercial sales 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 three months ended March 31, 2012, we had an operating loss of $7.1 million and a net loss of $115.5 million, including $108.4 million in non-cash expense related to the change in the fair value of outstanding warrants. Our cumulative net loss since our inception through March 31, 2012 was $367.6 million. Clinical trials are costly. We do not expect to generate any revenue from the commercial sales of our product candidates in the near term, and we expect to continue to have significant losses for the foreseeable future.

To attain ongoing profitability, we will need to develop products successfully and market and sell them effectively. We cannot predict when we will achieve ongoing profitability, if at all. We have never generated revenue from the commercial sales 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.

Our financial results are likely to fluctuate from period to period, making it difficult to evaluate our stock based on financial performance.

Our quarterly and annual results of operations are likely to fluctuate based on the timing of milestones and payments under our license and development agreement with Merck KGaA. We believe that period-to-period comparisons of our operating results should not be relied upon as predictive of future performance. Our prospects must be considered in light of the risks, expenses and difficulties encountered by companies with no approved pharmaceutical products, and with products that are undergoing clinical development.

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 cash, cash equivalents and marketable securities will be sufficient to fund the Company's projected operating requirements for at least the next twelve months based upon current operating plans, milestone payment forecasts and spending assumptions. We expect that we will need to raise additional capital to support new in-house development programs or to in-license or otherwise acquire and develop additional products or programs. We intend to seek funds through additional arrangements with collaborators or others that may require us to relinquish rights to the 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 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 the outcome of our clinical trials and other clinical and regulatory events, as well as factors related to financial, economic, and market conditions, 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 additional 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, and Senior Vice President of Discovery Research, Dr. Mark G. Matteucci. We do not have an employment agreement with Drs. Selick or Matteucci. The loss of the services of Drs. Selick 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 March 31, 2012, we had 35 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 South San Francisco, 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.

Under our license and co-development agreement with Merck KGaA, we are dependent on Merck for clinical and commercial supply of TH-302, except for clinical trials for United States approval of TH-302 for soft tissue sarcoma and for any other clinical trials for which we are responsible. In the latter case, we can obtain clinical supply directly from existing or new suppliers. Neither we nor Merck, have entered into any long term manufacturing or supply agreement for TH-302 or for any of our other 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 need to have sufficient TH-302 API and drug product to meet the clinical supply demands of our clinical trials. Additional clinical trial material continues to be manufactured as required. We have ordered additional API and drug product; however, we have experienced delays in the receipt of satisfactory drug product, and additional delays in the receipt of satisfactory drug product could cause delays in our clinical trials, which would harm our business. In addition, we will need to obtain additional supplies of TH-302 API and drug product to complete our ongoing studies and any other additional trials. The need for additional supplies may require manufacturing process improvements in TH-302 API and drug product. Changes to the formulation of TH-302 for our clinical trials may also require bridging studies to demonstrate the comparability of the new formulation with the old. These studies may delay our clinical trials and may not be successful. 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.

Merck will need to enter into additional agreements for additional supplies of TH-302 to complete clinical development and/or commercialize it or develop such capability itself. We cannot be certain that Merck can do so on favorable terms, if at all. The products will need to satisfy all current good manufacturing practice, or cGMP, regulations, including passing specifications. Merck’s inability to satisfy these requirements could delay our clinical programs.

If TH-302 or any of our other product candidates is approved by the FDA or other regulatory agencies for commercial sale, we or Merck as applicable, will need to have it manufactured in commercial quantities. It may not be possible to increase the manufacturing capacity for TH-302 or any of our other 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 Merck with respect to TH-302, or we with respect to our other product candidates, are unable to successfully increase the manufacturing capacity for such 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 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 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 US and foreign issued patents that cover certain hypoxia-targeted 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.

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 or 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 may 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 identical, similar or alternative product candidates to 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 patents and 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 patent applications, unknown to us, which may later result in issued patents that our product candidates 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 pharmaceutical 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 drug product

candidates 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

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 March 16, 2011, we issued warrants to purchase an aggregate of 5,725,227 shares of our common stock, at an exercise price of $2.46 per share. On October 5, 2009, we issued 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 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 result from, for example, sales under our at market issuance sales agreement dated October 29, 2010 as amended), 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;
- our or Merck's failure to meet milestones that would have given rise to payments under our agreement with Merck;
- announcements by Merck related to the development of TH-302 or announcements related to our agreement with Merck;
- 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, 2011, our officers, directors and other affiliates beneficially owned approximately 15.9% of our outstanding common stock. 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.

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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

None

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. Mine Safety Disclosures

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibits

The exhibits listed on the accompanying index to exhibits are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

Exhibit Number	Description
10.1	License and Co-Development Agreement between the Company and Merck KGaA, dated February 2, 2012+
31.1	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of Harold E. Selick.
31.2	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of Joel A. Fernandes.
32.1	Certification pursuant to 18 U.S.C. Section 1350 of Harold E. Selick.
32.2	Certification pursuant to 18 U.S.C. Section 1350 of Joel A. Fernandes.
101.INS	XBRL Instance Document++
101.SCH	XBRL Taxonomy Extension Schema Document++
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document++
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document++
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document++
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document++

\+ Confidential treatment has been requested with respect to portions of this exhibit. The redacted information has been filed separately with the SEC.

++ These interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under these sections.

SIGNATURES

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

Threshold Pharmaceuticals, Inc.

Date: May 3, 2012

/s/ Harold E. Selick

Harold E. Selick., Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Date: May 3, 2012

/s/ Joel A. Fernandes

Joel A. Fernandes
Vice President, Finance and Controller
(Principal Financial and Accounting Officer)

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Exhibit 10.1

LICENSE AND CO-DEVELOPMENT AGREEMENT BETWEEN THRESHOLD PHARMACEUTICALS AND MERCK KGAA

LICENSE AND CO-DEVELOPMENT AGREEMENT

THIS LICENSE AND CO-DEVELOPMENT AGREEMENT (the "**Agreement**") is made and entered into by and between MERCK KGaA, a corporation organized and existing under the laws of Germany and having a principal place of business at Frankfurter Strasse 250, 64293 Darmstadt, Germany (hereinafter referred to as "**Merck**" or **"Licensee"**), and THRESHOLD PHARMACEUTICALS, a corporation organized and existing under the laws of California and having its principal office at 170 Harbor Way, Suite 300, South San Francisco, CA 94080, USA (hereinafter referred to as **"Threshold**" or **"Licensor"**). Merck and Threshold may each be referred to herein individually as a "**Party**" and collectively as the "**Parties**."

RECITALS:

WHEREAS, Threshold is a pharmaceutical company engaged in the discovery and development of targeted therapeutics for cancer and has developed TH-302, a Compound (as hereinafter defined) designed to be selectively activated with hypoxic cells and thus having anti-tumor activity; and

WHEREAS, Merck is engaged in the research, development, manufacturing and commercialization of pharmaceutical products, and Merck is interested in developing and Commercializing (as hereinafter defined) products containing or comprising the Compound; and

WHEREAS, Merck desires to license from Licensor and Licensor wishes to license to Merck the right to Develop (as hereinafter defined) and Commercialize products comprising the Compound pursuant to the terms and conditions of this Agreement; and

WHEREAS, the Parties desire to jointly Develop the Compound and Licensed Product (as hereinafter defined) in accordance with this Agreement; and

WHEREAS, Threshold, upon the terms and conditions set forth in this Agreement, shall have an option to Co-commercialize (as hereinafter defined) the Licensed Product in the Co-commercialization Territory (as hereinafter defined) together with Merck; and

WHEREAS, the terms for Co-commercialization (as hereinafter defined) are set forth in a binding Co-commercialization Term Sheet (as hereinafter defined) based on which the Parties shall execute a Co-commercialization Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth below and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

ARTICLE 1.
DEFINITIONS

Capitalized terms shall have the meaning ascribed to them in this Article 1 or elsewhere in this Agreement:

1.1 "Affiliate" of a Party means a Person that is directly or indirectly controlled by that Party during the Term, but only for so long as such control exists. For the purposes of this Article 1.1, the word "control" (including, with correlative meaning, the terms "controlled by" or "under the common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct the management and policies of such Person, whether by the ownership of at least fifty percent (50%) of the voting stock of such Person, or by contract or otherwise.

1.2 "Calendar Quarter" means each three (3) month period commencing January 1, April 1, July 1 or October 1, provided however that (i) the first Calendar Quarter of the Term shall extend from the Effective Date to the end of the first full Calendar Quarter thereafter, and (ii) the last Calendar Quarter of the Term shall end upon the expiration of this Agreement.

1.3 "Calendar Year" means the period beginning on the 1st of January and ending on the 31st of December of the same year, provided however that (i) the first Calendar Year of the Term shall commence on the Effective Date and end on December 31, 2012 and (ii) the last Calendar Year of the Term shall commence on January 1 of the Calendar Year in which this Agreement terminates or expires and end on the date of termination or expiration of this Agreement.

1.4 "cGCP" means the current standards, practices and procedures set forth in the International Conference on Harmonization (ICH) guidelines entitled "Guidance for Industry E6 Good Clinical Practice: Consolidated Guidance" including related requirements imposed by the FDA, and equivalent non-U.S. regulations or standards, as applicable, as such standards, practices, procedures, requirements and regulations may be amended from time to time.

1.5 "cGLP" means the current good laboratory practice regulations promulgated by the FDA, published at 21 U.S C.F.R. § 58, and equivalent non-United States regulations or standards, as applicable, as such current laboratory practices, regulations and equivalent non-United States regulations or standards may be amended from time to time.

1.6 "cGMP" means those current practices, as amended from time to time, related to the manufacture of pharmaceutical products and any precursors thereto promulgated in guidelines and regulations of standard compilations including the GMP Rules of the World Health Organization, the United States Code of Federal Regulations, the Guide to Inspection of Bulk Pharmaceutical Chemicals (established by the United States Department of Health and Human Services), the Pharmaceutical Inspection Convention, and the European Community Guide to Good Manufacturing Practice in the production of pharmaceutical products.

1.7 "Change of Control" means

(a) a transaction or series of related transactions that results in the sale or other disposition of all or substantially all of a Party's assets relating to the subject matter of this Agreement; or

(b) a merger or consolidation in which a Party is not the surviving corporation or in which, if a Party is the surviving corporation, the shareholders of such Party immediately prior to the consummation of such merger or consolidation do not, immediately after consummation of such merger or consolidation, possess a majority of the voting power of all of the Party's outstanding stock and other securities and the power to elect a majority of the members of the Party's board of directors; or

(c) a transaction or series of related transactions (which may include without limitation a tender offer for a Party's stock or the issuance, sale or exchange of stock of a Party) if the shareholders of such Party immediately prior to the initial such transaction do not, immediately after consummation of such transaction or any of such related transactions, own stock or other securities of the entity that possess a majority of the voting power of all of the Party's outstanding stock and other securities and the power to elect a majority of the members of the Party's board of directors; provided, however, that notwithstanding anything in the foregoing, the issuance of stock by a Party in an equity financing shall not constitute a Change of Control.

1.8 "Clinical Supply" means the supply of requirements of Licensed Product and/or Compound for Clinical Trials under this Agreement.

1.9 "Clinical Trial" means a clinical trial in human subjects that has been approved by a Regulatory Authority and is designed to measure the safety and/or efficacy of a Licensed Product. Clinical Trials shall include Phase I Trials, Phase II Trials, Phase III Trials and Phase IV Trials.

1.10 [* * *].

1.11 [* * *].

1.12 [* * *].

1.13 "Combination Product" means a product containing the Licensed Product together with one or more other active ingredients, or with one or more specialized delivery devices or products.

1.14 [* * *].

1.15 "Co-commercialization" or "Co-commercialize" means the Commercialization activities of the Parties with respect to the Licensed Product together in the Co-commercialization Territory.

1.16 "Co-commercialization Agreement" means the agreement for co-commercialization to be established between the Parties pursuant to Article 7.5(b) for the Co-commercialization Territory if Threshold exercises the Co-commercialization Option.

1.17 "Co-commercialization Option" means the option of Threshold to Co-commercialize the Licensed Product in the Co-commercialization Territory as defined in Article 7.5(a).

1.18 "Co-commercialization Term Sheet" shall mean [* * *].

1.19 "Co-commercialization Territory" shall mean the US.

1.20 "Commercial Supply" means the supply of Licensed Product for Commercialization in the Territory.

1.21 "Commercialization" or "Commercialize" means any and all activities undertaken before and after Regulatory Approval of an NDA for the Licensed Product that relate to the marketing, promoting, distributing, importing or exporting for sale, offering for sale, and selling of the Licensed Product.

1.22 "Commercially Reasonable Efforts" means, (a) with respect to the efforts to be expended by any Party with respect to any objective, such **[* * *]** and (b) with respect to any objective relating to Development or Commercialization of a Licensed Product by a Party, the application by such Party, consistent with the exercise of its prudent scientific and business judgment, of **[* * *]** other factors as the Parties may reasonably consider,**[* * *]**. Subject to the foregoing, Commercially Reasonable Efforts will not mean that the Parties commit that it will actually accomplish the applicable task.

1.23 "Compound" means the hypoxia-activated prodrug TH-302, **[* * *]**.

1.24 "**Compulsory License**" means a compulsory license under Licensor Patents obtained by a Third Party through the order, decree, or grant of a competent Governmental Body **[* * *]** import a pharmaceutical product containing the Compound in the applicable country.

1.25 "Confidential Information" of a Party means Know-How and other information relating to the business, operations, and products of a Party or any of its Affiliates, that is not known or generally available to the public, that such Party discloses to the other Party under this Agreement, or otherwise becomes known to the other Party by virtue of this Agreement.

1.26 "Controlled" means, with respect to (a) Patent Rights, (b) Know-How or (c) biological, chemical or physical material, that a Party or one of its Affiliates owns or has a license or sublicense to such Patent Rights, Know-How or material (or in the case of material, has the right to physical possession of such material) and has the ability to grant a license or sublicense with respect to such Patent Rights and Know-How, of the scope of the licenses contemplated in this Agreement, or transfer such material as provided for in this Agreement, without violating the terms of any agreement or other arrangement with any Third Party.

1.27 "**Co-promote**" or "**Co-promotion**" means the promoting of Licensed Products (including detailing, solicitation of sales), but does not include the actual distribution or sale of Licensed Products. Co-promotion activities shall be further set out in the Co-promotion Term Sheet.

1.28 "Cost of Goods" shall have the meaning set forth on Exhibit A hereto.

1.29 "Cover," "Covering" or **"Covered"** means, with respect to a Licensed Product and relevant Patent Rights, that the making, using, selling, or offering for sale of such Licensed Product would, but for a license, infringe a Valid Claim of the relevant Patent Rights in any country in which any such activity occurs or that the Licensed Product is claimed in or covered by a Pending Claim.

1.30 "Development Expenses" means [* * *]

1.31 "Development Plan" means (a) the Initial Development Plan and (b) subsequent plans established and updated in accordance with Article 4.2 setting forth the Development of the Licensed Product under this Agreement.

1.32 "Development Plan Budget" shall have the meaning set forth in Article 4.4.

1.33 "Development" or "Develop" means, with respect to the Compound or a Licensed Product, the performance of all research, non-clinical, pre-clinical and clinical development (including, without limitation, toxicology, pharmacology, test method development and stability testing, process development, formulation development, quality control development, and statistical analysis), Clinical Trials, manufacturing and regulatory activities that are required to obtain Regulatory Approval of such Licensed Product under this Agreement by either Party.

1.34 "Effective Date" means the later of (i) the Execution Date and (ii) the date of HSR Clearance, if HSR Filings are required for this transaction.

1.35 "EMA" means the European Medicines Agency or any successor agency.

1.36 "European Commission" means the authority within the European Union that has the legal authority to grant Regulatory Approvals in the European Union based on input received from the EMA or other competent Regulatory Authorities.

1.37 "European Union" or "EU" means the European Union and all its member states.

1.38 "Execution Date" means the date of last signature of this Agreement.

1.39 "**Executive Officers**" means, together, a member of the PEC (**"Pharmaceutical Executive Committee"**) of the pharmaceutical division of Merck and the Chief Executive Officer of Licensor.

1.40 "FDA" means the United States Food and Drug Administration, or a successor federal agency thereto.

1.41 "Field" means any and all prophylactic, palliative, therapeutic or diagnostic uses in humans or other animals.

1.42 "Financial Representative" has the meaning set forth in Article 3.11.

1.43 "First Commercial Sale" means, with respect to a Licensed Product in any country, the first commercial transfer or disposition for value of such Licensed Product in such country to a Third Party by Merck, an Affiliate of Merck or a Sublicensee after all Regulatory Approvals therefore have been obtained in such country.

1.44 "**FTE**" means a full time equivalent person year of scientific or technical work on or directly related to the Development activities, [* * *].

1.45 "FTE Costs" means the cost of the work performed by FTEs, applying the FTE Rate.

1.46 "FTE Rate" means the annual FTE rate of [* * *].

1.47 [* * *].

1.48 "Governmental Body" means any: (a) nation, principality, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; or (c) other governmental or quasi-governmental authority of any nature.

1.49 "**IFRS**" means the International Financial Reporting Standards, the set of accounting standards and interpretations and the framework in force on the Effective Date and adopted by the European Union as issued by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC), as such accounting standards may be amended from time to time.

1.50 "IND" means an investigational new drug application filed with the FDA or the equivalent application or filing filed with any equivalent agency or Governmental Body outside the United States (including any supra-national entity such as in the European Union) for approval to commence Clinical Trials in such jurisdiction.

1.51 "**IND Filing**" means the filing of an IND for a Licensed Product with the relevant Regulatory Authority.

1.52 "**IND Filing Acceptance**" means the receipt of notice from the relevant Regulatory Authority that an IND for the Licensed Product has met all the criteria for filing acceptance.

1.53 "Indication" means a generally acknowledged disease or condition, a significant manifestation of a disease or condition, or symptoms associated with a disease or condition or a risk for a disease or condition. For the avoidance of doubt, all variants of a single disease or condition (whether classified by severity or otherwise) shall be treated as the same Indication.

1.54 "Initial Development Plan" means the initial plan setting forth the Development of the Licensed Product under this Agreement that is attached hereto as Exhibit B.

1.55 "Initiation" of a Clinical Trial means the date of enrollment of the first subject/patient in such Clinical Trial.

1.56 "Inventions" means any Know-How, whether patentable or not, created, made, invented or developed by or on behalf of a Party or its Affiliates (solely or jointly) during the Term and in the course of performing activities under this Agreement.

1.57 "Joint Inventions" means any and all Inventions created, made, invented or developed jointly (as determined under US patent Law) by employees of Merck or its Affiliates and Threshold or its Affiliates or others acting on behalf of Merck or Threshold or their respective Affiliates.

1.58 "Joint Patents" means any and all Patent Rights which claim Joint Inventions.

1.59 "Joint Technology" means Joint Patents, Joint Inventions, and Non-Patent Rights embodied in Joint Inventions.

1.60 "Know-How" means any inventions, discoveries, creations, developments, data, and other information and materials, in any tangible or intangible form whatsoever, including scientific or technical information, results and data, trade secrets, databases, practices, protocols, regulatory filings, methods, processes, techniques, concepts, ideas, reagents, specifications, formulations, formulae, data (including, but not limited to, pharmacological, biological, chemical, toxicological, clinical and analytical information, quality control, trial and stability data), case reports forms, data analyses, reports, studies and procedures, designs for experiments and tests and results of experimentation and testing (including results of research or development), summaries and information contained in submissions to and information from ethical committees, the FDA or other Regulatory Authorities, and manufacturing process and development information, results and data, whether or not patentable.

1.61 "Knowledge" means [* * *].

1.62 "Law" or "Laws" means all applicable laws, statutes, rules, regulations, ordinances and other pronouncements having the binding effect of law of any Governmental Body.

1.63 "Licensed Product" means the Compound (including, for clarity, in finished form) in any dosage form, formulation, presentation or package configuration.

1.64 "Licensee" means Merck.

1.65 "Licensor" means Threshold.

1.66 "Licensor Bankruptcy Event" means (a) voluntary or involuntary proceedings by or against Licensor are instituted in bankruptcy under any insolvency law, which proceedings, if involuntary, shall not have been dismissed within sixty (60) days after the date of filing; (b) a receiver or custodian is appointed for Licensor; (c) proceedings are instituted by or against Licensor for corporate dissolution, liquidation or winding-up of Licensor, which proceedings, if involuntary, shall not have been dismissed within sixty (60) days after the date of filing; or (d) substantially all of the assets of Licensor are seized or attached and not released within sixty (60) days thereafter.

1.67 "Licensor Inventions" mean any and all Inventions created, made, invented or developed solely by employees of Threshold or its Affiliates or other persons not employed by Merck or its Affiliates acting on behalf of Threshold or its Affiliates.

1.68 "Licensor Know-How" means all Know-How that is Controlled by Licensor or any of its Affiliates as of the Execution Date or at any time thereafter during the Term (including Licensor Inventions) that is necessary for the Development, manufacture, use, or Commercialization of the Licensed Products.

1.69 "Licensor Materials" means all Materials that are Controlled by Licensor or any of its Affiliates as of the Execution Date or at any time thereafter during the Term and that are necessary for the Development, manufacture, use or Commercialization of the Licensed Products.

1.70 "Licensor Patents" means all Patent Rights that are Controlled by Licensor or its Affiliates as of the Execution Date or at any time thereafter during the Term and that Cover the Compound or the Licensed Product or their manufacture or use. For the sake of clarity, Joint Patents are not Licensor Patents.

1.71 "Licensor Technology" means the Licensor Patents, the Licensor Know-How, Licensor Materials, and Non-Patent Rights Controlled by Licensor or its Affiliates embodied in Licensor Know-How or Licensor Materials.

1.72 "**Major Market**" means any of [* * *].

1.73 "Materials" means chemical, biological or physical materials.

1.74 "Merck Inventions" mean any and all Inventions created, made, invented or developed solely by employees of Merck or its Affiliates or other persons not employed by Threshold or its Affiliates acting on behalf of Merck or its Affiliates.

1.75 "Merck Know-How" means any and all Know-How that is Controlled by Merck or any of its Affiliates as of the Execution Date or at any time thereafter during the Term (including Merck Inventions) that is necessary for the Development, manufacture, use, or Commercialization of the Licensed Products.

1.76 "Merck Materials" means all Materials that are Controlled by Merck or any of its Affiliates as of the Execution Date or at any time thereafter during the Term and that are necessary for the Development, manufacture, use or Commercialization of the Licensed Products.

1.77 "Merck Patents" means all Patent Rights that are Controlled by Merck or its Affiliates as of the Execution Date or at any time thereafter during the Term and that Cover the Compound or the Licensed Product or their manufacture or use. Merck Patents include Merck's and its Affiliates interest in Joint Patents.

1.78 "Merck Technology" means Merck Patents, Merck Know-How, Merck Materials, and Non-Patent Rights Controlled by Merck or its Affiliates embodied in Merck Know-How or Merck Materials.

1.79 "NDA" means a New Drug Application filed pursuant to the requirements of the FDA, as more fully defined in 21 U.S. CFR.§ 314.3 et seq, a Biologics License Application filed pursuant to the requirements of the FDA, as more fully defined in 21 U.S. CFR § 601, and any equivalent application filed in any country, including a European Marketing Authorization Application, together, in each case, with all additions, deletions or supplements thereto.

1.80 "Net Sales" means [* * *].

1.81 [* * *].

1.82 "Non-Patent Rights" means intellectual property rights, including rights in Know-How, other than Patent Rights or trademark rights.

1.83 "Out-of-Pocket Expenses" means expenses actually paid by a Party or its Affiliates to any Third Party.

1.84 "Patent Right" means: (a) an issued or granted patent, including any extension, supplemental protection certificate, registration, confirmation, reissue, reexamination, extension or restoration by existing or future extension or restoration mechanisms (including, without limitation, supplementary protection certificates or the equivalent thereof), or renewal thereof; (b) a pending patent application, including any continuation, divisional, continuation-in-part, substitute or provisional application thereof; and (c) all counterparts or foreign equivalents of any of the foregoing issued by or filed in any country or other jurisdiction.

1.85 "Person" means any natural person, corporation, firm, business trust, joint venture, association, organization, company, partnership or other business entity, or any Governmental Body.

1.86 "Phase I Trial" means a Clinical Trial in which the Licensed Product is administered to human subjects at single and multiple dose levels with the primary purpose of determining safety, metabolism, and pharmacokinetic and pharmacodynamic properties of the Licensed Product, and which is consistent with 21 U.S. CFR § 312.21(a) or any other applicable Laws. For the purposes of the milestone payments in Article 6.3, a "Phase I Trial" shall be a Clinical Trial which is submitted to the Regulatory Authority as a Phase I Trial or as a Phase I/II Trial.

1.87 "Phase II Trial" means a Clinical Trial of the Licensed Product in human patients, the principal purposes of which are to make a preliminary determination that the Licensed Product is safe for its intended use, to determine its optimal dose, and to obtain sufficient information about the Licensed Product's efficacy to permit the design of Phase III Trials, and which is consistent with 21 U.S. CFR § 312.21(b) or any other applicable Laws.

1.88 "Phase III Trial" means a Clinical Trial of the Licensed Product in human patients, which trial is designed (a) to establish that the Licensed Product is safe and efficacious for its intended use; (b) to define warnings, precautions and adverse reactions that are associated with the Licensed Product in the dosage range to be prescribed; and (c) to be, either by itself or together with one or more other Clinical Trials having a comparable design and size, the final human Clinical Trial in support of Regulatory Approval of an NDA of the Licensed Product; and (d) consistent with 21 U.S. CFR § 312.21(c) or any other applicable Laws.

1.89 "Phase IV Trial" (or Post-Marketing Study, Medical Affairs Trial or Investigator-Sponsored Trial) shall mean an additional Clinical Trial of the Licensed Product in patients commenced after receipt of Regulatory Approval for the Licensed Product in a country, which Clinical Trial is conducted within the parameters of the Regulatory Approval, and shall include, without limitation, Clinical Trials required or requested by a Regulatory Authority as a condition of, or in connection with, obtaining Regulatory Approval of the Licensed Product. Phase IV Trials (or Post-Marketing Studies, Medical Affairs Trials or Investigator-Sponsored Trials) shall include, without limitation, Clinical Trials to gather additional information regarding the Licensed Product's potential risks, medical or pharmacoeconomic benefits, justification and descriptions for other Indications of the Licensed Product, data to be included in compendial listings, optimal use, dose, route and schedule of administration, epidemiological studies, modeling and pharmacoeconomic studies, and Investigator-Sponsored Clinical Trials.

1.90 "Price Approvals" means in those countries where Regulatory Authorities may approve or determine pricing and/or pricing reimbursement for pharmaceutical products, such approval or determination.

1.91 "Regulatory Approval" means any and all approvals, licenses, registrations, or authorizations of the relevant Regulatory Authority, including Price Approvals, necessary for the Development, manufacture, use, storage, import, transport or Commercialization of the Licensed Product in a particular country or jurisdiction. For the avoidance of doubt, Regulatory Approval to Commercialize the Licensed Product shall include Price Approval.

1.92 "Regulatory Authority" means (a) the FDA, (b) the EMA or the European Commission, or (c) any regulatory body with similar regulatory authority over pharmaceutical or biotechnology products in any other jurisdiction anywhere in the world.

1.93 "Rest of World" or **"ROW"** means worldwide but excluding the US.

1.94 "Royalty Term" means, on a Licensed Product-by-Licensed Product and country-by-country basis, the period from the First Commercial Sale of a Licensed Product in such country until the later of (a) the last date on which the Licensed Product is Covered by a Valid Claim within the Licensor Patents in such country, and (b) ten (10) years after such First Commercial Sale of such Licensed Product in such country.

1.95 [* * *].

1.96 [* * *].

1.97 "Sarcoma Program" means Development of the Licensed Product in the STS Indication for Regulatory Approval in the US consistent with the special protocol assessment ("**SPA**") as agreed by the FDA, including, without limitation, the Development activities described in Schedule 1.97.

1.98 "Soft Tissue Sarcoma" or **"STS"** means the Indication soft tissue sarcoma.

1.99 "Sublicensee" means a Person other than an Affiliate of Merck to which Merck (or its Affiliate) has, pursuant to and in accordance with Article 2.2, granted sublicense rights under any of the license rights granted under Article 2.1. "**Sublicense**" shall be construed accordingly.

1.100 "Tax" or **"Taxes"** means any applicable federal, state, local or foreign tax of any kind whatsoever, including any interest, penalty or addition thereon whether disputed or not.

1.101 "Territory" means worldwide.

1.102 "Third Party" means any Person other than Licensor, Merck or Affiliates of either of them, or (but only in their capacity as such) any Sublicensees.

1.103 "Third Party Action" means any claim or action made by a Third Party against either Party that claims that the manufacture, use, or sale of the Licensed Product infringes such Third Party's intellectual property rights.

1.104 "Third Party License Agreement" is defined in Article 6.7(b).

1.105 "United States" or "US" means the United States of America and its territories and possessions.

1.106 "**Valid Claim**" means a claim of (a) an issued and unexpired patent which has not lapsed or been revoked, abandoned or held unenforceable or invalid by a final decision of a court or governmental or supra-governmental agency of competent jurisdiction, unappealable or

unappealed within the time allowed for appeal, and which has not been disclaimed, denied or admitted to be invalid or unenforceable through reissue, reexamination or disclaimer or otherwise, or (b)(i) any pending bona fide and non-frivolous application submitted in good faith, or (ii) any pending application having a common priority date with a patent described in (a) above that has issued in any other country, in each such case of (i) and (ii), which claim has not been finally abandoned or denied or been held unpatentable by a final decision of a court or governmental or supra-governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal (each of (i) or (ii) above, a "**Pending Claim**"). For purposes of this clause, any such Pending Claim as described above that has been pending for more than [* * *].

1.107 Other Terms, The definition of each of the following terms is set forth in the Article of the Agreement indicated below:

"Abandoned Patent" has the meaning set forth in Article 9.5(b).

"Action" has the meaning set forth in Article 9.6(b).

[* * *].

"Alliance Manager" has the meaning set forth in Article 3.10.

"Affected Sales" has the meaning set forth in Article 6.7(b).

"Chairperson" has the meaning set forth in Article 3.1.

[* * *].

"Controlling Party" has the meaning set forth in Article 9.7(c).

"Co-commercialization Plan" has the meaning set forth in Article 7.1(c).

"Co-Commercialization Result Sharing" has the meaning set forth in Article 4.8(a).

"Co-promote Option" has the meaning set forth in Article 7.6.

"Co-promotion Committee" or **"CPC"** has the meaning as set forth in Article 3.9.

"**Co-promotion Term Sheet"** has the meaning set forth in Article 7.6.

"CROs" has the meaning as set forth in Article 4.5(iii).

"Cure Period" has the meaning set forth in Article 12.4(a).

"Expanded Development Plan" has the meaning set forth in Article 4.16.

[* * *].

"Independent Expert" has the meaning set forth in Article 6.2.

"Initial Development Plan" has the meaning set forth in Article 4.4.

"JAMS" has the meaning set forth in Article 7.5(c).

"Joint Commercialization Committee" or **"JCC"** has the meaning set forth in Article 3.9.

"Joint Medical Committee" or **"JMC"** has the meaning set forth in Article 3.9.

"Joint Project Team" or "JPT" has the meaning set forth in Article 3.8(a).

"JPT Chairpersons" has the meaning set forth in Article 3.8(a).

"JSC" or "Joint Steering Committee" has the meaning set forth in Article 3.1.

"Licensor Indemnitees" has the meaning set forth in Article 13.1.

"Mandated Expansions" has the meaning as set forth in Article 4.15.

"**Manufacturing Support**" has the meaning set forth in Article 8.1.

"**Manufacturing Technology Transfer**" has the meaning set forth in Article 2.4.

"**Manufacturing Technology Transfer Plan**" has the meaning set forth in Article 2.4.

"Merck Indemnitees" has the meaning set forth in Article 13.2.

"Non-Clinical Trial Work" has the meaning set forth in Article 4.8(b).

"Notice Period" has the meaning set forth in Article 7.5(a).

"Opt-In" has the meaning set forth in Article 4.7.

"Option Period" has the meaning set forth in Article 7.5(a).

"Other Payments" has the meaning set forth in Article 6.7(b).

[* * *].

[* * *].

"Quality Agreement" has the meaning set forth in Article 8.2(c).

"Phase II Pancreas Milestone" has the meaning set forth in Article 6.2.

"Phase II Pancreatic Cancer Trial" has the meaning set forth in Article 6.2.

"Phase III Pancreas Milestone" has the meaning set forth in Article 6.3.

"Positive" has the meaning set forth in Article 6.2.

"Post-approval Clinical Trials" has the meaning set forth in Article 4.8(a).

"Product Marks" has the meaning set forth in Article 7.4.

"Relevant Time" has the meaning set forth in Article 4.16(b).

"Responsible Party" has the meaning as set forth in Article 5.2.

"Term" has the meaning set forth in Article 12.1.

"Third Party Royalties" has the meaning set forth in Article 6.7(b).

"Treaty Benefits" has the meaning set forth in Article 6.13(a).

ARTICLE 2.

LICENSES AND OTHER RIGHTS

2.1 Grant of License to Merck. Subject to the terms and conditions of this Agreement, Licensor hereby grants to Merck and its Affiliates (subject to Article 16.3) a worldwide, royalty-bearing, non-transferable (except pursuant to Article 16.2) right and license (with the right to sublicense pursuant to the provisions of Article 2.2) under the Licensor Technology and Licensor's right, title and interest in Joint Technology to Develop, make, have made, import, export, use and Commercialize Compound and Licensed Products for use in the Field in the Territory, which license shall be (a) co-exclusive with Licensor and its Affiliates (subject to Article 4.14 and 4.15) with respect to the Development of Licensed Products under and in accordance with this Agreement, (b) subject to Article 8.2, 4.14 and 4.15, exclusive with respect to the manufacture of Licensed Products, (c) co-exclusive with Licensor and its Affiliates (subject to Article 4.14 and 4.15) with respect to the Co-commercialization of Licensed Products in the Co-commercialization Territory, under and in accordance with this Agreement and the Co-commercialization Agreement, if Licensor exercises its Co-commercialization Option pursuant to the terms of this Agreement, and (d) except as set forth in the foregoing, otherwise exclusive with respect to Commercialization of Licensed Products in the Territory. Nothing in this Agreement shall otherwise limit or restrict Licensor's right and ability to use and license any Licensor Technology, including in connection with research, development, commercialization and other activities related to products other than the Compound or Licensed Products.

2.2 Grant of Sublicense by Merck. Merck shall have the right to grant Sublicenses under the licenses granted in Article 2.1 subject to the following conditions:

(a) the granting by Merck of a Sublicense shall not relieve Merck of any of its obligations hereunder;

(b) [* * *];

(c) Merck shall procure that each of its Sublicensees complies with all relevant terms, restrictions and limitations in this Agreement, and any act or omission of a Sublicensee shall constitute an act or omission of Merck for purposes of this Agreement;

(d) in the event of a material default by any Sublicensee under a Sublicense agreement Merck will promptly inform Licensor and take such action, after consultation with Licensor, that will address such default [* * *].

2.3 Technology Transfer. As soon as reasonably practicable after the Effective Date, but in no event later than [* * *] following the Effective Date, Licensor will provide to Merck a copy of all Licensor Know-How and Licensor Materials (including but not limited to any preclinical data, clinical data, assays and associated materials, protocols, and procedures pertaining to Licensor's Development of the Compound as of the Effective Date) in Licensor's Control, that are necessary for Merck's Development pursuant to this Agreement. [* * *] Without limiting the generality of the foregoing but only as further set forth in the Development Plan or this Agreement, upon Merck's request in writing, Licensor shall (to the extent allowed by Law) assign to Merck (i) all applications and filings, except to the extent pertaining to the Sarcoma Program, made with any Regulatory Authority with respect to the Compound or Licensed Product, including any IND and orphan drug designations, and (ii) all agreements related to the conduct of any Clinical Trial with respect to the Compound or Licensed Product except for agreements pertaining to the Sarcoma Program or other Clinical Trials for which Threshold is responsible pursuant to the Development Plan.

2.4 Manufacturing Technology Transfer. As soon as reasonably practicable after the Effective Date, but in no event later than [* * *] following the Effective Date, Licensor will provide to Merck a copy of all Licensor Know-How and all Licensor Materials in Licensor's Control, that are necessary or useful for the manufacture of the Compound and the Licensed Products. [* * *] The technology transfer described in this Article 2.4 shall be referred to as the "**Manufacturing Technology Transfer**" and shall be conducted in accordance with the manufacturing technology transfer plan which plan shall be attached hereto as Exhibit C (the "**Manufacturing Technology Transfer Plan**") within sixty (60) days from the Effective Date. The costs and expenses of the Manufacturing Technology Transfer incurred by Licensor shall constitute Development

Expenses. Without limiting the generality of the foregoing, upon Merck's request Licensor shall cooperate with Merck to assign (subject to the counterparty's consent, where required) all of Licensor's agreements related to the manufacture and supply of Compound or Licensed Products, provided that Licensor shall retain its rights to procure Clinical Supply as set forth in Article 8.1.

2.5 Procedures for Technology Transfer. The technology transfers set forth in Article 2.3 and Article 2.4 shall occur in an orderly fashion and in a manner such that the value, usefulness and confidentiality of the Licensor Know-How and Licensor Materials are preserved in all material respects. During the Term, each Party shall provide to the other Party full and prompt disclosure, but in no event less frequently than semi-annually, through the JSC, of any Know-How or Materials that become Controlled by such Party or any of its Affiliates after the Execution Date and that is necessary for the other Party to conduct its activities or exercise its rights as contemplated hereunder and shall promptly following such disclosure, provide to such other Party copies of such Know-How and such Materials.

2.6 Non-Exclusive License Grant. In the event that exercising the rights granted to it herein and performing its obligations hereunder by a Party would infringe during the Term any Patent Rights which are Controlled by the other Party (and which are not otherwise licensed hereunder), such other Party hereby grants to the first Party, to the extent such other Party is legally able to do so, a non-exclusive, sublicensable, royalty-free license under such Patent Rights solely for such first Party to exercise the rights granted to it herein and perform its obligations hereunder.

2.7 No Implied Licenses. Except as specifically set forth in this Agreement, neither Party shall acquire any right, title, license, or other interest, by implication or otherwise, with respect to any information, Know-How or Materials disclosed or provided to it under this Agreement or under any Patent Rights or other intellectual property rights Controlled by the other Party or its Affiliates.

2.8 Grant of License to Licensor. Subject to the terms and conditions of this Agreement, Merck hereby grants to Licensor and its Affiliates (subject to Article 16.2), (i) a co-exclusive, worldwide, royalty-free license with the right to sublicense to subcontractors (in accordance with Article 4.9 and 7.2) to Merck Technology and Merck's share in the Joint Technology solely for the purposes of Licensor and its Affiliates Developing the Licensed Product together with Merck under this Agreement, and (ii) if Licensor exercises its Co-commercialization Option pursuant to the terms of this Agreement, a co-exclusive, royalty free license, with the right to sublicense to subcontractors (in accordance with Article 4.9 and 7.2), to Merck Technology and Merck's share in the Joint Technology solely for the purposes of Licensor Co-commercializing the Licensed Product in the Co-commercialization Territory.

ARTICLE 3.

GOVERNANCE

3.1 Formation and Composition of the Joint Steering Committee As soon as reasonably practicable after the Effective Date, but in no event later than thirty (30) days

following the Execution Date, a Joint Steering Committee shall be established, and each Party shall have the right to designate three (3) representatives from such Party (the "**JSC**" or "**Joint Steering Committee**") drawn from the ranks of senior management of each Party, and the first meeting held. The Parties shall notify one another in writing of any change in the membership of the JSC. An alternate member designated by a Party may serve temporarily in the absence of a permanent member of the JSC for such Party. Each Party will designate one member of the JSC as the "**Chairperson**" on Calendar Yearly alternating basis. Merck will designate the first Chairperson. [* * *].

3.2 JSC Functions and Powers. The JSC shall manage the Development activities of the Parties under this Agreement. In particular, the JSC shall, subject to the other provisions of this Agreement:

(a) review, modify, and approve the Development strategy and oversee the Co-commercialization in the Co-commercialization Territory for the Licensed Product;

(b) review, modify, and approve the annual Development Plan proposed by the JPT, including all relevant timelines and the applicable Development Plan Budget (subject to Article 4.4), no later than by [* * *] of each Calendar Year for the following year;

(c) review, modify, and approve amendments to the Development Plan proposed by the JPT from time-to-time, including any amendments to the relevant timelines set forth therein;

(d) review, modify, and approve each Development Plan Budget (subject to Article 4.4), including any overspend (subject to Article 4.13);

(e) review and revise the FTE rate on an annual basis with increases not to exceed [* * *] per year;

(f) monitor the progress of each Development program under the Development Plan and each Party's diligence in carrying out its responsibilities in connection therewith, and review, discuss and comment any results thereunder;

(g) [* * *];

(h) resolve any disputes or disagreements brought forward to it for resolution by the JPT or any of its other subcommittees;

(i) oversee the handling of any safety issues concerning the Licensed Product;

(j) serve as the first forum for the settlement of disputes or disagreements between the Parties resulting from or arising out of this Agreement or the Co-commercialization Agreement; and

(k) perform such other functions as appropriate to further the purposes of this Agreement, as expressly set forth herein or as may be mutually agreed to in writing by the Parties.

3.3 Limitations of Powers of the JSC. The JSC shall have no power to amend or modify any term or condition of, or take any action inconsistent with the terms and conditions of this Agreement and shall have only such powers as are specifically delegated to it, and shall be subject to any restrictions and limitations set forth in this Agreement.

3.4 Determinations.

(a) The JSC will take action by unanimous consent of the Parties, with each Party having a single vote, irrespective of the number of representatives actually in attendance at a meeting. Determinations of the JSC can also be made by a written resolution, signed by a designated representative of each of the Parties. In the event the JSC is unable to secure unanimous consent on a matter within its power, such matter shall be referred to the Executive Officers or their respective designees in accordance with Article 15. If the Executive Officers cannot resolve the dispute, then Merck, acting reasonably and in good faith and in furtherance of the Parties' joint interest to successfully Develop and Commercialize the Licensed Product in the Field in the Territory, consistent with this Agreement, shall have the right to make the final determination on any such matter except as provided in (b) below.

(b) [* * *].

3.5 Meetings of the JSC. Subject to the provisions of Article 3.7, the JSC shall hold meetings at least once each Calendar Quarter (unless otherwise unanimously agreed by the JSC) at such times and places as shall be determined by the JSC (including by videoconference, telephone, or web conference), but in no event, shall such meetings be held in person less frequently than once every six (6) months (unless otherwise unanimously agreed by the Parties). At least three (3) members of the JSC will constitute a quorum for any meeting, provided that at least one (1) representative from each Party is present. The Chairperson will be responsible for organizing the meetings of the JSC and for distributing the agenda of the meetings, but will have no additional powers or rights beyond those held by the other representatives to the JSC. The Chairperson will include on the agenda any item within the scope of the responsibility of the JSC that is requested to be included by a Party, and will distribute the agenda to the Parties no less than five (5) days before any meeting of the JSC. A Party may invite other senior personnel of their organization to attend meetings of the JSC, as appropriate, provided, however, that such other senior personnel shall not have any rights or duties of a JSC member. The JSC may act without a meeting if prior to such action a written consent thereto is given by both Parties. Each Party shall be responsible for its travel costs incurred for attending JSC meetings.

3.6 Meeting Minutes. Minutes will be kept of all JSC meetings by the Chairperson and sent to all members of the JSC for review and approval within fourteen (14) days after each meeting. Minutes will be deemed approved unless any member of the JSC objects to the accuracy of such minutes by providing written notice to the other members of the JSC within seven (7) days of receipt of the minutes. In the event of any such objection that is not resolved by mutual agreement of the Parties, such minutes will be amended to reflect such unresolved dispute.

3.7 Urgent Matters. Notwithstanding anything in Article 3.5 expressed or implied to the contrary, in the event that an urgent issue or matter arises, that requires prompt action by the JSC, the JSC shall arrange for a teleconference call (or otherwise meet) for the purpose of resolving the issue or matter. Such JSC teleconference call shall take place as promptly as possible, with the immediacy of the issue or matter requiring JSC action determining the time, place and manner of the conduct of the meeting.

3.8 Subcommittees. The JSC may form subcommittees as determined by the needs of the Parties. Any subcommittee established by the JSC shall have appropriate and equal representation of each Party. Any such subcommittee shall be given assignments from the JSC, shall be subject to the authority of the JSC, shall have no power or authority greater than that of the JSC, and shall report its actions to the JSC. At the request of either Party at any time, any such subcommittee shall be dissolved and its powers and functions returned to the JSC. The Parties hereby initially agree to establish the following subcommittees:

(a) **Joint Project Team.** As soon as reasonably practicable after the Effective Date, but in no event later than thirty (30) days following the Effective Date a joint project team composed of an equal number of representatives from each Party (the **"Joint Project Team"** or **"JPT"**) and co-chaired by representatives from each Party (the **"JPT Chairpersons"**) to:

(i) recommend to the JSC a strategy for Development and Regulatory Approval of the Licensed Product, all in accordance with the Development Plan;

(ii) develop, review, and revise as necessary, the Development Plans, including the Development Plan Budget, once per Calendar Year, all in accordance with the provisions of Article 4, and submit any revisions to the JSC for comment and approval;

(iii) review and approve all clinical and non-clinical study protocols of all contemplated Clinical Trials;

(iv) oversee the implementation of, and monitor the progress of, the clinical and regulatory program, consistent with the Development Plan, including the allocation of qualified personnel who have specific accountabilities as regards the Development Plan objectives; and

(v) seek consensus in any decisions to be made by the JPT and submit any disagreement to the JSC for resolution;

(vi) recommend to the JSC a generic name for the Compound; and

(vii) perform such other functions requested by the JSC consistent with and subject to the terms of this Agreement.

(b) **JPT Meetings.** Until first launch of the Licensed Product, the JPT shall hold meetings at least once each Calendar Quarter (unless mutually agreed otherwise by the Parties) at such times and places as shall be determined by the JPT (including by videoconference), but in no event, shall such meetings be held in person less frequently than once every six (6) months, and the selection of the venue of such in person meetings shall be alternately in Darmstadt, Germany and South San Francisco, California, USA, unless otherwise agreed.

3.9 Committees in the Co-commercialization Territory. No later than thirty (30) days after Threshold has exercised its Co-commercialization Option pursuant to the terms of this Agreement, the Parties shall establish, as further set forth in the Co-commercialization Agreement, (i) a joint commercialization committee for the coordination of the Commercialization activities in the Co-commercialization Territory (the **"Joint Commercialization Committee"** or **"JCC"**), and (ii) a joint medical committee for coordination of medical affairs and related activities in the Co-commercialization Territory (the **"Joint Medical Committee"** or **"JMC"**), each composed of three (3) representatives from each Party and chaired by one representative from Merck. In no event shall the JMC include commercial personnel from either Party. No later than three (3) months after Licensor's exercise of the Co-promote Option pursuant to Article 7.6, the Parties shall establish a co-promotion committee (the **"Co-promotion Committee"** or **"CPC"**) composed of three (3) representatives from each Party and chaired by one representative from Merck.

3.10 Appointment of Alliance Managers. Each Party shall appoint an alliance manager who is assigned to manage and oversee the governance of the Agreement (each, a "**Alliance Manager**") within ten (10) days of the Effective Date and shall promptly thereafter notify the other Party of such appointment. If at any time a vacancy occurs for any reason, the Party that appointed the prior incumbent shall as soon as reasonably practicable appoint a successor. Each Party shall promptly notify the other Party of any substitution of another person as its Alliance Manager. Each Party's Alliance Manager will be available during the existence of the JSC, to answer any reasonable questions from the other Party. Alliance Managers from each Party will coordinate and attend committee meetings as necessary, and will facilitate JSC meetings (in case of a meeting in person, such responsibilities shall be taken by the Alliance Manager of a hosting Party, or in case of a meeting by any other means, Alliance Manager of Threshold or Merck alternately).

3.11 Accounting and Financial Reporting. The Parties shall each appoint one (1) representative with expertise in the areas of accounting, cost allocation, budgeting and financial reporting (each, a **"Financial Representative")** no later than ninety (90) days after the Effective Date. Such Financial Representatives shall consult with the JSC, in order to address the financial, budgetary and accounting issues that arise in connection with the Development Plan and/or, upon valid exercise by Threshold of its Co-commercialization Option, the Co-commercialization Plan. Each Financial Representative may be replaced at any time by the represented Party by providing notice thereof to the other Party. The Financial Representatives will meet as they or the Parties, through the JSC, may agree is appropriate.

3.12 Termination of JSC. If the joint Development of the Licensed Product ceases for whatever reason, the JSC and its subcommittees shall automatically disband and cease to exist and Merck shall become solely responsible for Development responsibilities previously assigned to Licensor and shall make the final determination with respect to any Development related matter in accordance with this Agreement acting reasonably and in good faith and in furtherance of the Parties' joint interest to successfully Develop and Commercialize the Licensed Product in the Field in the Territory.

ARTICLE 4.

DEVELOPMENT OF LICENSED PRODUCT

4.1 Development of the Licensed Product. Threshold and Merck shall jointly and collaboratively Develop the Licensed Product in the Territory and conduct (either by themselves or through their respective Affiliates, agents or Third Party subcontractors) all Development activities (including Clinical Trials and non-clinical studies) to obtain Regulatory Approval for any Licensed Product in any Indication in the Territory in accordance with the Development Plan and the other terms of this Agreement. The Parties shall use Commercially Reasonable Efforts to diligently Develop the Licensed Product in accordance with the Development Plan and the other terms of this Agreement, it being understood that Threshold will be responsible for the Sarcoma Program as set forth in Article 4.6.

4.2 Development Plan. The Initial Development Plan (which is attached to this Agreement as Exhibit B) describes the overall program and the parties fundamental agreement with respect to the Development of Licensed Products in the Field in the Territory under this Agreement, including the Indications to be pursued initially, estimated filing and Regulatory Approval dates, type of Clinical Trials and estimated number of enrolled subjects, and the Parties' respective responsibilities. The Initial Development Plan also includes the Initial Development Plan Budget. The JPT shall prepare, within [* * *] days after the initial completion of technology transfer as laid out in Article 2.3 a more detailed Development Plan and thereafter on a regular basis (at least annually), propose updates to the Development Plan covering required or appropriate amendments, changes, and additions to the Development work, specifying each Party's specific Development activities, the allocation of responsibilities with respect thereto, and the Development Plan Budget and the timelines associated with the Development activities to be carried out by each Party. Such proposed updated Development Plans shall be submitted to the JSC for review and approval. Upon approval by the JSC, the Development Plan shall forthwith govern the Development of the Licensed Product in the Field in the Territory. Any conflict between the Parties in the JSC regarding any updated Development Plan shall be resolved in accordance with Article 3.4.

4.3 Ongoing Clinical Trials at the Effective Date. Clinical Trials initiated by Threshold prior to and ongoing as of the Effective Date as listed in Schedule 4.3 (which Schedule includes the estimated aggregate costs for Calendar Year 2012 for such ongoing Clinical Trials) shall continue and remain with Threshold and not be transferred to Merck. [* * *].

4.4 Development Plan Budget. The Initial Development Plan is accompanied by a budget, broken down in annual sub-budgets, setting forth the projected total, and annual, Development Expenses under the Initial Development Plan (the **"Initial Development Plan Budget"**). [* * *] of each Calendar Year, the Development Plan Budget then in effect shall be reviewed by the JPT and any proposed modifications, if necessary, shall be submitted to the JSC for review and approval. Upon approval by the JSC, the modified Development Plan Budget shall forthwith govern. Any conflict between the Parties in the JSC regarding any updated Development Plan Budget shall be resolved in accordance with Article 3.4. Development Expenses identified within the Development Plan Budget shall initially be borne by the Party incurring the cost or expense, subject to reconciliation and reimbursement pursuant to Article 4.10.

4.5 General. Each Party shall assign qualified personnel and devote adequate resources, consistent with the Development Plan, the Development Plan Budget, and this Agreement, to perform its responsibilities under the Development Plan. Specific Development tasks addressed in the Development Plan may include:

(i) non-clinical studies and Clinical Trials of the Licensed Product (including Phase IV Clinical Trials as further set out in Article 4.8), including establishment of protocols for such Clinical Trials and estimated timeframes for completion of such activities;

(ii) tests, studies and activities that may be required or recommended by or for any Regulatory Authority to obtain Regulatory Approval of the Licensed Product in the Territory (including, without limitation, toxicology and safety assessment studies, pharmacokinetic and metabolic studies, statistical analysis and report writing, regulatory activities and approval and registration activities) and estimated timeframes for completion of such activities;

(iii) engagement of scientific, medical, technical, regulatory and legal consultants and experts, and clinical research organizations (**"CROs"**);

(iv) conduct of activities directed to obtaining Price Approvals for Licensed Product, as applicable;

(v) conduct of activities directed to line extensions and lifecycle management for Licensed Product, as applicable; and

(vi) conduct of such other activities in connection with Development of Licensed Product as are contemplated under this Agreement.

4.6 Allocation of Tasks under the Development Plan Subject to Articles 4.1 and 4.2 and the other provisions of this Agreement, the Development Plan shall allocate Development activities, responsibilities and tasks, including sponsorship of Clinical Trials, between the Parties in accordance with and in furtherance of the Development Plan, [* * *].

Notwithstanding anything to the contrary in the Development Plan, Threshold shall be responsible for Development activities within the Sarcoma Program, including continuing the ongoing Phase III Trial and any additional mandated Clinical Trials for the Sarcoma Program, [* * *].

4.7 [* * *].

4.8 Post-approval Clinical Trials and Non-Clinical Trial Work.

(a) Any Clinical Trials conducted in an Indication after the Regulatory Approval of such Indication (**"Post-approval Clinical Trials"**) shall form part of the Development activities of the Parties and be included in the Development Plan independent of whether it is a mandated or a Non-mandated Clinical Trial. [* * *].

(b) If either Party desires to conduct one or more studies of a Licensed Product that are not Clinical Trials (**"Non-Clinical Trial Work"**), such Party shall propose such Non-Clinical Trial Work as an update to the Development Plan to the JSC for review and approval. Notwithstanding anything to the contrary set forth in this Agreement, if the JSC updates the Development Plan (including, without limitation, the Development Plan Budget) by including such Non-Clinical Trial Work, then the other Party shall have the right to do either of the following:

(1) Such Party shall have the right to participate in such Non-Clinical Trial Work, provided that it funds its share of the Development Expense; or

(2) Such Party shall have the right to immediately opt out of such Non-Clinical Trial Work, in which case the other Party shall be solely responsible for costs and expenses for such Non-Clinical Trial Work.

Without limiting anything set forth in this Agreement, at least once per Calendar Quarter, the Party conducting Non-Clinical Trial Work shall provide the other Party with reasonably detailed written reports regarding the status of such Non-Clinical Trial Work.

4.9 Right to Subcontract. Each Party may subcontract to Third Parties portions of any Development activities to be performed by it under the Development Plan or contract with

consultants to provide services specifically relating to such activities without the prior consent of the other Party, but in consultation and coordination with the JPT, as long as each such subcontractor shall enter into an agreement with such Party requiring such subcontractor to maintain Confidential Information of the other Party in confidence and to comply in all material respects with all applicable provisions of this Agreement and all requirements of applicable Laws, together with all applicable cGLP, cGMP and cGCP. The subcontracting Party shall negotiate and execute such agreements at its expense, and shall supervise and be responsible under this Agreement for such subcontracted work. All such subcontracts shall be consistent with the terms of this Agreement. Any subcontract granted or entered into by a Party as contemplated by this Article 4.9 shall not relieve such Party from any of its obligations under this Agreement.

4.10 Sharing of Development Expenses. Unless otherwise set forth in this Agreement, Development Expenses incurred by the Parties and their respective Affiliates in the conduct of the Development Plan, to the extent such Development Expenses are within the Development Plan Budget (except as provided in Article 4.13), shall be borne by the Parties according to the following split: seventy percent (70%) of the Development Expenses shall be borne by Merck and thirty (30 %) of the Development Expenses shall be borne by Threshold based on the Development Plan Budget as may be revised from time to time in accordance with Article 4.4. Within forty-five (45) days following the end of each Calendar Quarter, for as long as the Parties are performing Development in the Territory according to the Development Plan, each of the Parties shall submit to the other Party, a written report setting forth in reasonable detail all Development Expenses it incurred in performing its Development activities during such Calendar Quarter. Within thirty (30) days following a Party's receipt of such report from the other Party, the Financial Representatives shall calculate total Development Expenses for such Calendar Quarter, allocate each Party's respective share and shall submit the calculations to the JSC for approval, provided that any decision of the JSC with respect thereto shall require the express written consent of both parties to the extent that any such decision would result in a Party being responsible for more than its allocated budget of Development Expenses [* * *]. The Party that has incurred Development Expenses in excess of its share, shall invoice the other Party for the difference between the Development Expenses it has incurred and the Development Expenses it should have incurred pursuant to the split of Development Expenses set forth above and the other Party shall pay such invoice within thirty (30) days of its receipt. The JPT shall track Development Expenses and immediately inform the JSC of any Development Plan Budget overruns.

4.11 Recording and Cost of Personnel. Each Party will ensure that it accurately records the time for its personnel engaged in Development activities under the Development Plan to be charged as Development Expenses, and each Party shall use an appropriate system of recording so as to permit an accurate and consistent allocation of costs among its various projects, and no such cost shall be considered Development Expenses unless reported under such system. The Parties shall provide, at the request of the other Party, information sufficient for the other Party or its Financial Representative to verify that each Party is in compliance with the provisions of this Article 4.11. The Parties shall keep the respective records for at least three years unless more stringent retention periods are required by applicable Laws.

4.12 Review of Development Expenses. Each Party's Financial Representative shall review the actual amount of Development Expenses incurred by the other Party pursuant to the

Development Plan, and compare such amounts to the amounts set forth in the Development Plan Budget, specifically noting the extent, if any, to which such amounts exceed such budgeted amounts. Each Party agrees to provide information, answer questions and generally cooperate with the other Party's Financial Representative so as to assist such other Party's Financial Representative in verifying that it has submitted to the Financial Representatives the proper amounts of Development Expenses with respect to any applicable Calendar Quarter in connection with the Development Plan.

4.13 Reimbursement of Excess Development Expenses. While the Parties shall use Commercially Reasonable Efforts to perform their Development activities pursuant to the Development Plan in accordance with the Development Plan Budget, the Parties also understand that overspends can occur during Development of Licensed Product. Any Development Expenses in excess of the Development Plan Budget requires approval so as to become budgetable. The JSC shall have the authority to approve excess Development Expenses of up to [* * *] in excess of the originally budgeted amount for such Development Expenses. Any other excess Development Expenses require express approval by both Parties, such approval not to be unreasonably withheld or delayed. Excess Development Expenses so approved shall be split as provided in Article 4.10. Any excess Development Expenses that are not so approved shall be borne solely by the Party that has incurred such excess Development Expenses. For clarity, Mandated Expansions as set forth in Article 4.15, Development Expenses with respect to Article 9.5(h) and Development Expenses under Article 4.16 shall not be treated as excess Development Expenses.

4.14 Threshold's Non-funding of Committed Development Expenses. If Threshold cannot fund the agreed upon share in Development Expenses (including approved excess Development Expenses) under the Initial Development Plan and Initial Development Plan Budget in any Calendar Year, Threshold shall fund its share to the extent possible, and, for the remaining portion of its share, Threshold may, [* * *].

4.15 Funding of Expansions to the Development Program. If Threshold cannot fund its share in the Development Expenses because the Development Expenses increased in the course of the Development due to extensions of the Development Plan required by Regulatory Authorities or triggered by the then available results of the Development ("**Mandated Expansions**"), Threshold shall fund its share to the extent possible, and, for the remaining portion of its share, Threshold may, for [* * *].

4.16 Expanded Development Plan.

(a) If Threshold cannot fund its share in the Development Expenses because the Development Expenses increased due to an expansion of the Initial Development Plan by one or more further Indications (the **"Expanded Development Plan"**), Threshold shall have the right to do either of the following:

(1) [* * *].

(2) [* * *].

[* * *]

(b) [* * *].

4.17 Step-In. Merck has the right to assume responsibility for any Licensor Development activities if the joint Development is rightfully terminated by Merck pursuant to Article 4.14 or Article 4.15 or Threshold has opted out in accordance with Article 4.16. If Merck exercises its right to assume responsibility for such Licensor Development activities, Licensor shall promptly (i) provide copies to Merck of any Licensor Know-How and Licensor Materials in Licensor's Control that are used by Licensor, and necessary for Merck to continue, such Licensor Development activities, (ii) at Merck's request, exercise Commercially Reasonable Efforts to transfer to Merck any Third Party sub-contract agreements entered into by the Licensor relating to the Licensor Development activities, and (iii) provide reasonable assistance in connection with the transfer to Merck of such Licensor Development activities. For the avoidance of doubt, no Licensor Development Expenses shall accrue following the completion of such assumption by Merck of Licensor Development activities. Each Party shall bear its own costs associated with the transfer of the Licensor Development activities to Merck hereunder.

4.18 Audit Rights. Each Party shall have the right to audit or to arrange for the audit of the books and records of the other Party for purposes of confirming the amount of Development Expenses incurred by such other Party in connection with the Development Plan during one or more Calendar Quarters. Any such audit shall be at the auditing Party's expense unless such audit reveals that the amount of such Development Expenses was overstated [* * *] in which case the audited Party shall reimburse the auditing Party for all of the reasonable Out-of-Pocket Expenses incurred by the auditing Party in connection with such audit.

ARTICLE 5.

REGULATORY MATTERS

5.1 Regulatory Filings. Except as otherwise agreed by the JSC, or as set forth in Article 4.6 as regards the Sarcoma Program, Merck shall prepare, make, own and maintain all regulatory filings and Regulatory Approvals for the Licensed Products, including all INDs and NDAs. Each Responsible Party shall act in consultation with the other Party.

5.2 Communication with Regulatory Authorities. For purposes of this ARTICLE 5, "**Responsible Party**" means, with respect to regulatory filings and Regulatory Approvals, the Party preparing, making and maintaining such filings pursuant to Articles 4.6 and 5.1. Upon the Responsible Party's request, the other Party shall provide reasonable assistance with respect to regulatory filings and each Party shall have full rights of reference with respect to the other Party's regulatory filings and Regulatory Approvals for Licensed Products for purposes of making its own regulatory filings with respect to Licensed Products pursuant to and in accordance with this Agreement. The Responsible Party shall be responsible for and act as the sole point of contact with the Regulatory Authorities in connection with its regulatory filings. The Responsible Party shall invite a qualified representative from the other Party to participate in and contribute to all meetings with the Regulatory Authorities relating to the Licensed Products. The Responsible Party shall provide the other Party with copies of its regulatory filings and applications [* * *] prior to their submission to the Regulatory Authorities and shall consider to include in such filings and applications any reasonable comments made and provided by the

other Party. Notwithstanding the foregoing, material issues, such as but not limited to label scope, in communications with Regulatory Authorities shall be discussed by the Parties and approved at JSC prior to actual implementation, except that final determination with respect to the Sarcoma Program shall be made by Threshold acting reasonably and in good faith and in furtherance of the Parties' joint interest to successfully Develop and Commercialize the Licensed Product in the Field in the Territory. The Responsible Party shall promptly provide the other Party with all copies of any written communication between the Responsible Party and the Regulatory Authorities relating to the Licensed Products. Upon Regulatory Approval of the Licensed Product for the STS Indication in the US, Licensor shall assign the related regulatory filings and Regulatory Approvals to Merck.

5.3 Collection and Exchange of Pharmacovigilance Data. As soon as practical following the Effective Date but at the latest before Merck is filing their first IND, the Parties shall negotiate in good faith and enter into a safety data exchange agreement, which shall be applicable to such pre-marketing safety information that will be available from Clinical Trials and shall set forth standard operating procedures governing the collection, investigation, reporting, and exchange of information concerning adverse drug reactions/adverse events sufficient to permit each Party to comply with its regulatory and other legal obligations within the applicable timeframes. In the event the first NDA for the Licensed Product is filed, the Parties shall initiate negotiation with an aim to amend such safety data exchange agreement to include a post-marketing safety data exchange before such NDA is expected to be approved by a Regulatory Authority, which shall be applicable to such post-marketing safety information that will be available from post-marketing experiences with Licensed Product to permit each Party to comply with all regulatory and legal requirements regarding the management of safety data by providing for the exchange of relevant information in appropriate format within applicable timeframes. Subject to the foregoing, each Party with respect to their joint Development or joint Commercialization activities, shall be responsible for monitoring all clinical experiences each Party makes with respect to Licensed Products in the course of their Licensed Product Development and Commercialization, and Merck shall be responsible for filing all required reports with the Regulatory Authority with respect thereto (other than for Development activities within the Sarcoma Program with respect to which Licensor shall be responsible for filing such reports).

ARTICLE 6.

FINANCIAL PROVISIONS

6.1 Initial Fee. In partial consideration of Licensor's grant of the rights and licenses to Merck, Merck shall pay, or cause to be paid to Licensor a one-time, non-refundable fee of twenty-five million USD (USD 25,000,000), within fifteen (15) days after an invoice from Threshold after the Effective Date. Payment of the initial fee shall be subject to withholding tax obligations, if any, as set forth in Article 6.13.

6.2 Phase II Pancreas Milestone. As further partial consideration for Licensor's grant of the rights and licenses to Merck, Threshold shall earn another milestone (the **"Phase II Pancreas Milestone"**), if the results from the Phase II pancreatic cancer trial (the**"Phase II Pancreatic Cancer Trial"** listed as TH-404) are Positive (as hereinafter defined). The results

shall be considered positive (hereinafter "Positive"), if the following criteria are met: [* * *]. Within 30 days of confirmation that the Phase II Pancreatic Cancer Trial is Positive, and upon receipt of an invoice, but not before the Effective Date, Merck shall pay, or cause to be paid to Licensor a non-refundable fee of twenty million US Dollars (USD 20,000,000). Payment of the Phase II Pancreas Milestone shall be subject to withholding tax obligations, if any, as set forth in Article 6.13. In the event that the Phase II Pancreatic Cancer Trial is not Positive as determined pursuant to the foregoing and Merck has not yet paid such Phase II Pancreas Milestone, but Merck nonetheless decides to initiate a Phase III Trial in pancreatic cancer, the Phase III Pancreas Milestone payment shall be increased to [* * *].

6.3 Further Milestone Payments.

As further partial consideration for Licensor's grant of the rights and licenses to Merck hereunder, Merck shall pay, or cause to be paid, to Licensor the following non-refundable milestone payments. Merck or Licensor, as applicable, shall promptly, but in no event later than ten (10) days, notify the other Party in writing of the achievement of any such milestone event and shall make the applicable milestone payment within thirty (30) days upon receipt of an invoice from Threshold after achievement of such milestone but not before the Effective Date, except that Merck may defer payment of the [* * *]payment until the earlier to occur of [* * *].

Milestone event	Milestone Payment USD
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]

For the avoidance of doubt, the total maximum milestones payable under this Article 6.3 shall not exceed [* * *].

A milestone event that occurs in or with respect to the European Union shall mean any such event in or with respect to [* * *].

A milestone event that occurs with respect to a First Commercial Sale of a Licensed Product in an Indication in a country in the Territory other than the first Indication approved in such country, shall be considered achieved upon the earlier of [* * *].

Each milestone payment to be made under this Agreement shall be due and payable only once, regardless of the number of Licensed Products Developed, or the number of Indications pursued or approved or whether a Licensed Product is discontinued after a milestone payment has been made.

6.4 Commercial Event Payments.

As further partial consideration for Licensor's grant of rights and licenses to Merck hereunder, Merck shall pay Licensor the following non-refundable amounts for the achievement of the following commercial event milestones:

(a) [* * *] for the first Calendar Year in which the aggregate annual worldwide Net Sales in all Indications of the Licensed Product exceed [* * *];

(b) [* * *] for the first Calendar Year in which the aggregate worldwide annual Net Sales in all Indications of the Licensed Product exceed[* * *];

(c) [* * *] for the first Calendar Year in which the aggregate annual worldwide Net Sales in all Indications of the Licensed Product exceed [* * *];

(d) [* * *] for the first Calendar Year in which the aggregate annual worldwide Net Sales in all Indications of the Licensed Product exceed [* * *];

[* * *].

Merck shall deliver written notice to Licensor within forty-five (45) days of the end of the Calendar Year in which a commercial event milestone occurs and pay the corresponding commercial event milestone payment to Licensor within thirty (30) days after receipt of the applicable invoice. Threshold will issue a corresponding invoice for the commercial event milestone payment set forth in the aforementioned written notice.

For the avoidance of doubt, each aforementioned commercial event milestone payment shall be made only once, regardless of the number of Calendar Years in which the Licensed Product achieves such commercial event milestone. For example, if for a Calendar Year, aggregate annual worldwide Net Sales in all Indications for the Licensed Product are [* * *].

The achievement of a higher commercial event milestone shall trigger the payment of a lower commercial event milestone in the event such lower commercial event milestone had not been triggered prior to achievement of the higher commercial event milestone. For example, if in [* * *] trigger the payment of the commercial event milestones of (b) **and** the lesser commercial event milestone in (a) (which had not been previously triggered).

For the avoidance of doubt, the total maximum milestones payable under this Article 6.4 shall not exceed [* * *].

6.5 Royalty Payments for Licensed Products.

(a) As further consideration for Licensor's grant of the rights and licenses to Merck hereunder, Merck shall, during the Royalty Term, pay to Licensor a non-refundable royalty on aggregate annual Net Sales of the Licensed Product for each Calendar Year, on a Licensed Product-by-Licensed Product and a country-by-country basis at the percentage rates set forth below (subject to Articles 6.5 (c), 6.6, and 6.7 below):

Annual Net Sales of Licensed Product per Calendar Year (in U.S. Dollars) in the US if no Co-commercialization occurs	Incremental Royalty Rate
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	

Annual ROW Net Sales of Licensed Product per Calendar Year (in U.S. Dollars)	Incremental Royalty Rate
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]

If the Adjustment Trigger occurs, then the royalty rates shall be as follows:

[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]

By way of illustration, [* * *]:

[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]

(b) For purposes of determining whether a royalty threshold or a commercial event milestone described in Article 6.4 above, has been attained, only Net Sales that are subject to a royalty payment shall be included in the total amount of Net Sales and any Net Sales that are not subject to a royalty payment shall be excluded (e.g. it would not include Net Sales for a certain Licensed Product in a certain country if the Royalty Term has ended with respect to such Licensed Product in such country). In addition, in no event shall the mere manufacture (i.e., absent a sale) of the Licensed Product give rise to a royalty obligation. For clarity, Merck's obligation to pay royalties to Licensor under this Article 6 is imposed only once with respect to

the same unit of Licensed Product regardless of the number of Licensor Patents pertaining thereto. Upfront fees and milestone payments pursuant to Articles 6.1, 6.2, 6.3, and 6.4 are not an advance or otherwise creditable against royalties, and vice versa.

(c) In the event certain Net Sales are subject to the royalty reductions set forth in Article 6.7 below, Merck shall calculate the ROW royalty payment as follows: Merck shall first calculate the % proportions of ROW Net Sales that are (i) not subject to any royalty reduction pursuant to either of Article 6.7 (to which the full royalty rate in Article 6.5 (a) shall apply) (A%); and (ii) subject to a royalty reduction pursuant to Article 6.7 (B%) and then, for each of these subtotals of ROW Net Sales the full or respectively reduced royalty rates in Article 6.5 will be applied, whereby the Net Sales band set forth in Article 6.5 (a) shall in each case be multiplied with the adjustment factors A% or respectively B%.

[* * *]:	
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]
[* * *]	[***]

6.6 Compulsory License. In the event that Licensor or Merck receives a request for a Compulsory License anywhere in the world, it shall promptly notify the other Party. If any Third Party obtains a Compulsory License in any country, then Licensor or Merck (whoever has first notice) shall promptly notify the other Party. The Party that receives a request for a Compulsory License will use reasonable efforts to oppose the imposition of such Compulsory License or limit the scope thereof. For the avoidance of doubt, for purposes of calculating the royalties due to Licensor under Article 6.5 with respect to sales of the Licensed Product by any Compulsory Licensee, Merck's Net Sales from such sales shall be calculated based solely on the actual royalty payments, if any, paid pursuant to the Compulsory License to Merck. In addition, should Merck grant a Sublicense to a Third Party in any country to avoid the imposition of a Compulsory License that would otherwise be granted, the royalty rate payable under Article 6.5 to Licensor shall also be adjusted to reflect the terms of such sublicense (provided that such terms are no less beneficial than the terms of the Compulsory License being avoided).

6.7 Reductions, Deductions and Reimbursements.

(a) During the Royalty Term, the royalty rates set forth in Article 6.5(a) will be reduced by [* * *], on a Licensed Product-by-Licensed Product and country-by-country basis, if and only as long as the following conditions are met with respect to the specific Licensed Product and the specific country at issue: (i) there exists no Valid Claim of a Licensor Patent in such country that Covers such Licensed Product in such country, and (ii) a Third Party obtains Regulatory Approval for a pharmaceutical product containing Compound in the same country and such Third Party product is being sold for use in the Field in such country.

(b) If a Licensed Product cannot be sold in one or more countries without such sale infringing a Patent Right of a Third Party ("**Affected Sales**"), and Merck wishes to enter into a license agreement with such Third Party with respect to such Affected Sales ("**Third Party License Agreement**"), [* * *]. If Merck thereafter enters into a Third Party License Agreement, Merck will be entitled to deduct from any amounts payable to Licensor pursuant to Articles 6.4 or 6.5(a) on account of Net Sales that would be Affected Sales absent the Third Party License Agreement, [* * *]. For purposes hereof, "**Third Party Royalties**" means running royalties due and actually paid under the Third Party License Agreement on account of Net Sales that would be Affected Sales absent the Third Party License Agreement, but only to the extent such royalties are attributable to the license under the Third Party's relevant Patent Rights as described above (and not any other rights or benefits under such Third Party Agreement). For purposes hereof, "**Other Payments**" means upfront and other lump sum payments due and actually paid under the Third Party License Agreement, but only to the extent such payments are attributable to the license under the Third Party's relevant Patent Rights as described above (and not any other rights or benefits under such Third Party Agreement). In no event shall Merck be entitled to deduct any portion of any other payments under such Third Party License. In no event shall Merck be entitled to make any deductions pursuant to this Article 6.7(b) from royalties due Licensor that are based on the reduced royalty rate pursuant to Article 6.7(a).

(c) In no event shall Licensor be responsible for payment or reimbursement of any Third Party Royalties or Other Payments.

(d) Notwithstanding anything to the contrary herein, in no event shall any amount payable to Licensor under this Agreement be reduced (whether pursuant to Article 6.7(b) or any other provision or combination of provisions of this Agreement) to less [* * *] of the amount that would be payable absent any reduction.

(e) [* * *].

6.8 Timing of Payment. Royalties payable under Article 6.5(a) shall accrue at the time the invoice for the sale of the Licensed Product is delivered. Royalty obligations that have accrued during a particular Calendar Quarter shall be paid, on a Calendar Quarter basis, within forty-five (45) days after the end of the applicable Calendar Quarter, concurrently with the submission of the royalty report for the Calendar Quarter during which the royalty obligation accrued.

6.9 Mode of Payment and Currency.

(a) All payments to Licensor hereunder shall be made by deposit of US Dollars in the requisite amount on the due date in immediately available funds to such bank account as Licensor may from time to time designate by written notice to Merck. With respect to sales (and other amounts) not denominated in US Dollars, Merck shall convert such amounts in foreign currency into US Dollars by using the then current and reasonable standard exchange rate methodology as consistently applied to its external reporting generally. Based on the resulting amounts in US Dollars, the then applicable royalties shall be calculated. The Parties may vary the method of payment set forth herein at any time upon mutual agreement, and any change shall be consistent with the local Law at the place of payment or remittance.

(b) Invoices of Licensor shall be addressed to:

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt
Germany
Attn: R&D Controlling
Facsimile: +49.6151.72.3370

6.10 Royalty Reports and Records Retention. Within forty-five (45) days after the end of each Calendar Quarter during which the Licensed Products have been sold, Merck shall deliver to Licensor, together with the applicable royalty payment due, a written report, on a Licensed Product-by-Licensed Product and a country-by-country basis, setting forth (i) the total number of Licensed Products Sold, (ii) gross amounts invoiced, aggregate Net Sales, and the

calculation of Net Sales, including any deductions made, (iii) royalties payable and the calculation thereof, and (iv) applicable exchange rates used. Additionally, within fifteen (15) days after the end of each calendar month during the first year during which the First Commercial Sale of a Licensed Product occurs, Merck shall deliver such written report for such License Product on a country-by-country basis. Such reports shall be deemed Confidential Information of both Parties subject to the obligations of Article 8 of this Agreement. For at least [* * *] after submission of each such report, Merck shall keep (and shall ensure that its Affiliates and Sublicensees shall keep) complete and accurate records of all relevant data in sufficient detail to confirm the accuracy of the royalty calculations and other information to be reported hereunder.

6.11 Late Payments. All payments under this Agreement shall earn interest from the date due until paid at a per annum rate equal to the lesser of (a) the maximum rate permissible under applicable Law and (b) [* * *] above the monthly Reuters 01 EURIBOR, measured at 2 p.m. Frankfurt/Germany time on the date payment is due. Interest will be calculated on a [* * *] basis.

6.12 Audits.

(a) During the Royalty Term and for [* * *] thereafter, upon the written request of Licensor, and not more than once in each Calendar Year, Merck shall permit, and shall cause its Affiliates and Sublicensees to permit, an independent certified public accounting firm of nationally recognized standing selected by Licensor, and reasonably acceptable to Merck or such Affiliate or Sublicensee, to have access to and to review, during normal business hours upon reasonable prior written notice, the applicable records of Merck and its Affiliates or Sublicensees to verify the accuracy of the royalty reports and payments under this Article 6. Such review may cover the records for sales made in, or otherwise pertaining to, any Calendar Year ending not more than [* * *] prior to the date of such request. The accounting firm shall disclose to Licensor and Merck only whether the royalty reports and payments made are correct or incorrect, the basis for its findings, and the specific details concerning any discrepancies. No other information shall be provided to Licensor.

(b) If such accounting firm concludes that additional royalties were owed during such period, and Merck does not in good faith dispute such calculation, Merck shall pay the additional royalties within [* * *] after the date Licensor delivers to Merck such accounting firm's written report. If such accounting firm concludes that an overpayment was made, and Licensor does not in good faith dispute such calculation, such overpayment shall be fully creditable against amounts payable in subsequent payment periods or at Merck's request, shall be reimbursed to Merck within [* * *] after such request. If Merck disagrees with Licensor's accountant's calculation, it may retain, at its own cost, its own independent certified public accounting firm of recognized standing and reasonably acceptable to Licensor, to conduct a review, and if such firm concurs with the other accounting firm, Merck shall make the required payment within [* * *] after the date Merck receives the report of its accounting firm. If Merck's accounting firm does not concur, Merck and Licensor shall meet and negotiate in good faith a resolution of the discrepancies between the two firms, and if they cannot agree, each Party may pursue other remedies. Licensor shall pay for the cost of its audit, unless Merck has underpaid Licensor by [* * *] or more, in which case Merck shall pay for the costs of the audit.

(c) Each Party shall treat all information that it receives under this Article 6.13 in accordance with the confidentiality provisions of Article 10 of this Agreement, and shall cause its accounting firm to abide by confidentiality restrictions consistent with those hereunder and requiring such firm to retain all such financial information in confidence in a manner consistent with Article 10 hereof.

6.13 Taxes.

(a) **Withholding Tax**. Licensor shall be responsible for the payment of any and all Taxes levied on account of the royalties and other payments paid to Licensor by Merck under this Agreement. If applicable Law requires that Taxes be deducted and withheld from royalties or other payments paid by Merck under this Agreement, Merck shall (i) deduct those Taxes and interests and penalties assessed thereon from the payment or from any other payment owed by Merck hereunder; (ii) pay the Taxes to the proper Governmental Body; (iii) send evidence of the obligation together with proof of Tax payment to Licensor within one hundred (100) days following such payment; (iv) remit the net amount, after deductions or withholding made under this Article 6.13(a) and (v) cooperate with Licensor in any way reasonably requested by Licensor, to obtain available reductions, credits or refunds of such Taxes. Assuming that Licensor is the beneficial owner of Licensor Technology, the cooperation referred to in subparagraph (v) of the foregoing sentence shall include, without limitation, that Licensor shall provide Merck with a written confirmation from the competent tax authority on the German tax application form that Licensor has its residence in the United States which would allow the Parties to benefit from the reduced withholding Tax rate set forth in the Double Taxation Convention existing between Germany and the United States ("**Treaty Benefits**"). Notwithstanding the foregoing, in the event that payments are made by an Affiliate of Merck pursuant to an assignment by Merck or a Sublicensee, and as a result of such Affiliate's or Sublicenee's residence Treaty Benefits are not available, then all payments hereunder shall be increased so that Licensor receives the same amount it would have received if Treaty Benefits were available, provided, however, that Licensor shall cooperate with such Affiliate or Sublicensee to obtain available reductions, credits or refunds.

(b) **Value Added Tax**. It is understood and agreed between the Parties that any payments made by Merck under this Agreement are inclusive of any value added or similar Tax imposed upon such payment and that Licensor shall be responsible for the payment of any and all Taxes levied on account of any payments paid to Licensor by Merck. Merck is entitled to receive a proper tax invoice where any Value Added Tax amount is shown separately.

ARTICLE 7.

COMMERCIALIZATION

7.1 Commercialization of Licensed Product by Merck.

(a) Merck by itself or through one or more of its Affiliates or Third Parties selected by Merck in accordance with Articles 2.2, 4.9 and 7.2, and the other provisions of this Agreement, shall be responsible for the Commercialization of the Licensed Product in the Territory and shall use Commercially Reasonable Efforts to Commercialize the Licensed Product

in accordance with this Agreement and applicable Laws, shall bear the costs of such Commercialization, and shall record all sales of the Licensed Product in the Territory unless Threshold exercises its Co-commercialization Option for the Co-commercialization Territory in which case the Commercialization responsibility shall be shared between Merck and Threshold for the Co-commercialization Territory as provided in the Co-commercialization Term Sheet and the Co-commercialization Agreement. The additional details of such Co-commercialization for the Co-commercialization Territory shall be as set forth in the Co-commercialization Agreement.

(b) The launch strategy determined by Merck for the Licensed Product shall be derived from the results achieved from Development of the Licensed Product and will be subject to Merck's exercise of Commercially Reasonable Efforts. Activities by Merck's Affiliates and Sublicensees will be considered as Merck's activities under this Agreement for purposes of determining whether Merck has complied with any obligation to use Commercially Reasonably Efforts. Merck shall represent only such facts about the Licensed Product that are consistent with applicable Regulatory Approvals and Laws.

(c) Before Licensor has exercised its Co-commercialization Option and following expiration of the Co-commercialization Option, Merck shall provide no later than [* * *] of each Calendar Year, to Licensor, for review, a high level commercialization plan for the Licensed Product in the Territory. Following Licensor's exercise of its Co-commercialization Option, Merck shall submit to the JCC no later than [* * *] of each Calendar Year, a high level commercialization plan for the Licensed Product outside the Co-commercialization Territory. In either case, Merck's provision of such high-level commercialization plan shall be for informational purposes only and Licensor or JCC, as applicable, shall not have the right to comment on or approve such commercialization plan. Following Licensor's exercise of its Co-commercialization Option pursuant to the terms of this Agreement, the JCC shall establish and finalize a commercialization plan for the Licensed Product in the Co-commercialization Territory on a Licensed Product-by-Licensed Product and Indication-by-Indication basis, which plan sets forth the items described in the Co-commercialization Term Sheet ("**Co-commercialization Plan**"). Furthermore, following Licensor's exercise of its Co-commercialization Option pursuant to the terms of this Agreement, the JMC shall establish and finalize a medical plan for the Licensed Product in the Co-commercialization Territory on an Indication-by-Indication basis, which sets forth a medical affairs strategy that includes plans for medical field strategy, publications, symposia and other relevant medical activities contemplated by the JMC.

7.2 Right to Subcontract. With respect to the Co-commercialization Territory upon exercise of the Co-commercialization Option, each Party may exercise any of the rights or obligations that it may have under this Agreement by subcontracting the exercise or performance of all or any portion of such rights and obligations on such Party's behalf, but only in consultation and coordination with the JCC, and otherwise in accordance with the requirements described in Article 4.9. Outside the Co-commercialization Territory and, in case the Co-commercialization Option is not exercised, within the Co-commercialization Territory, Merck can subcontract without such consultation or coordination.

7.3 Reporting. Merck shall, no later than [* * *] of each Calendar Year, provide Licensor with a written report summarizing in reasonable detail its Commercialization activities

conducted during the prior Calendar Year and expenses characterized by activity during such Calendar Year. All information and reports provided to Licensor pursuant to this Article 7.3 shall be without any commitment from Merck and shall be treated as Confidential Information of Merck hereunder.

7.4 Trade Marks. As between Licensor and Merck, Merck shall have the right, in consultation with Licensor, to select trademarks for the Licensed Products and shall own and, at its cost, register, prosecute, maintain, and defend all such trademarks ("**Product Marks**"); provided that if Licensor exercises its Co-commercialization Option, Licensor's corporate mark and logo shall be displayed on all packaging and package inserts of Licensed Products sold in the Co-commercialization Territory, equally prominently as the display of Merck's corporate mark and logo, and otherwise in a manner as agreed by the Parties. In all other cases the packaging and package inserts shall include a reference to Licensor (*i.e.*, "under license from…" or other similar language) in accordance with applicable Laws.

7.5 Co-commercialization Option.

(a) Subject to Articles 4.14, 4.15 and 4.16, in partial consideration for Threshold's paying its share in the joint Development of the Licensed Product, Merck grants to Threshold an exclusive option to Co-commercialize all, but not less than all, Licensed Product in the Co-commercialization Territory (the **"Co-commercialization Option"**). [* * *]. For purposes of this Article, the "**Notice Period**" shall be [* * *] after Licensor's receipt of notice from Merck of the occurrence of [* * *].

(b) Unless the Parties mutually agree otherwise, before [* * *], the Parties shall negotiate and agree upon the Co-commercialization Agreement consistent with, and incorporating the terms of the Co-commercialization Term Sheet, which Co-commercialization Agreement shall come into force upon exercise of the Co-commercialization Option. The Co-commercialization Term Sheet shall be binding and govern in the event that the Parties fail to agree on a specific matter.

(c) If the Parties fail to mutually agree upon a Co-commercialization Agreement consistent with, and incorporating the terms of the Co-commercialization Term Sheet, pursuant to Article 7.5(b) of this Agreement before [* * *], the Parties shall submit to binding arbitration subject to the terms set forth herein, unless otherwise agreed by the Parties. Whenever a Party decides to institute arbitration proceedings to resolve such failure to agree upon a Co-commercialization Agreement, it shall give written notice to that effect to the other Party. [* * *].

(d) Within [* * *] from Threshold's exercise of its Co-commercialization Option, a Joint Commercialization Committee as further set forth in Article 3.9 (with its responsibilities set forth in the Co-commercialization Termsheet) and the Co-commercialization Agreement for the coordination of the Co-promotion activities in the Co-commercialization Territory shall be established.

(e) In case of Co-commercialization of the Licensed Product in the Co-commercialization Territory, Threshold shall not receive royalties for sales of the Licensed Product in the Co-commercialization Territory but instead the Parties shall operate a Co-Commercialization Result Sharing as further set forth in the Co-commercialization Term Sheet. [* * *].

(f) If Threshold fails to exercise its Co-commercialization Option within the Option Period, the Co-commercialization Option shall cease.

7.6 Co-promotion Option. In partial consideration for Threshold's paying its share in the joint Development of the Licensed Product, Merck grants to Threshold an exclusive option to Co-promote all, but not less than all, Licensed Products in the Co-commercialization Territory (the "**Co-promote Option**"). Threshold may exercise such Co-promote Option by written notice to Licensor [* * *].

7.7 General. The Parties shall (i) at all times conduct business in a manner that reflects favorably on the Licensed Product, (ii) not disparage the good name, good will, or reputation of the other Party; (iii) not engage in deceptive, misleading, or unethical practices; (iv) not make any false or misleading representations or other statements with regard to the other

Party or the Licensed Product; (v) represent only such facts about the Licensed Product as are accurate and consistent with applicable regulatory filings and Regulatory Approvals; and (vi) in no event make any representations, warranties, guarantees or other statements in the other Party's name or on the other Party's behalf, except as expressly approved in advance in writing by the other Party.

ARTICLE 8.

MANUFACTURE AND SUPPLY

8.1 Clinical and Commercial Manufacturing. Subject to the terms and conditions of this Agreement, Merck shall have the right and obligation subject to Commercially Reasonable Efforts to manufacture any Compound and Licensed Product itself or through one or more Sublicensees or other Third Parties selected by Merck. Such right shall be exclusive with respect to Commercial Supply and with respect to Clinical Supply, except that Licensor shall be allowed to continue to procure stability and validation batches and Clinical Supply for the Clinical Trials and the NDA within the Sarcoma Program including active pharmaceutical ingredient and drug product, and other Clinical Trials for which Threshold is responsible, under the existing agreement with [* * *] or through agreement with other suppliers of drug product (and shall have the right to have such Clinical Supply made by Syngene, Inc. or such other drug product suppliers) to the extent set forth herein. Licensor may conclude additional agreements with [* * *] or suppliers of drug product only with respect to Licensor's requirements of stability and validation batches and Clinical Supply as provided in the foregoing, as long as such agreements (or work orders) are for quantities and under commercial terms consistent with those currently contemplated by Licensor (as described on Schedule 8.1), but Licensor shall not make any other commitments with respect to the purchase of Clinical Supply or Commercial Supply, provided that Licensor shall not make any further commitment to any such suppliers before suitably qualified personnel of each Party have had the opportunity to discuss in good faith the manufacturing approach taken by Threshold for the Sarcoma Program; if so requested by Merck, Licensor shall reasonably and in good faith consider to procure stability and validation batches and Clinical Supply for the Clinical Trials and the NDA within the Sarcoma Program including active pharmaceutical ingredient and drug product from alternative vendors or other than as described on Schedule 8.1, or amend or revise the data packages to be supplied by such vendors to suit Merck's needs for global Clinical Supply or global Commercial Supply, provided such changes or discussions do not delay the Sarcoma Program. Starting from the Effective Date, for a period of [* * *], Licensor shall use Commercially Reasonable Efforts to make its employees and/or consultants or agents that are knowledgeable on the manufacture of the Compound and any Licensed Products available to Merck for scientific and technical explanations and advice, that may be required by Merck, relating to the manufacture of the Compound and any Licensed Products and the Manufacturing Technology Transfer (the "**Manufacturing Support**"), the scope of Manufacturing Support is set out in more detail in the Manufacturing Technology Transfer Plan. The costs and expenses of the Manufacturing Technology Transfer incurred by Licensor shall constitute Development Expenses.]

8.2 Clinical Supply.

(a) Merck shall manufacture or have manufactured all the requirements of Clinical Supply. Threshold may order Clinical Supply as set forth in Article 8.1. In addition, Threshold may order Clinical Supply for Clinical Trials for which Threshold is responsible (i) with the prior written consent of Merck, directly from Merck's suppliers under the same terms and conditions as Merck, or (ii) from Merck. In the case of (ii), subject to the short and long term requirement plans of Clinical Supply that have to be determined in accordance with the Development Plan, Threshold shall provide Merck with a formal order for Clinical Supply at least [* * *] prior to the requested delivery date of such Clinical Supply, and Merck shall supply such Clinical Supply requirements to Threshold by the delivery date, *provided, however,* that such orders are for Clinical Supply in a form, strength, specification or configuration meeting the then current regulatory filings. Merck shall supply Clinical Supply pursuant to the foregoing to Threshold free of charge, but the Cost of Goods for such Clinical Supply shall constitute Development Expenses of Merck. In the event that Threshold purchases Clinical Supply pursuant to Article 8.1 or directly from a Merck supplier, the Cost of Goods for such Clinical Supply shall constitute Development Expenses of Threshold.

(b) Merck shall manufacture or have manufactured the Clinical Supplies in accordance with all applicable Laws and regulatory filings, including without limitation cGMP (including without limitation, the cGMP requirements concerning documentation, reports and record keeping) and in accordance with the applicable specifications and other requirements, including any requirements pursuant to the Quality Agreement.

(c) Merck shall maintain complete and accurate records of all relevant data and information relating to the performance by Merck of its obligations under this Article 8.2. The Parties shall, if necessary, negotiate in good faith, and enter into a mutually agreed upon quality agreement for Clinical Supply ("**Quality Agreement**"), including reasonable and customary terms and conditions for quality control for Clinical Supply as soon as practicable after the Effective Date.

8.3 Commercial Supply. Merck shall be responsible for the manufacture of Commercial Supply of the Licensed Product in the Territory, either by itself or through one or more Third Parties selected by Merck, and all related tasks, obligations, and responsibilities (including filling, finishing, packaging, labeling, testing, sample retention, auditing, quality assurance, and the like). Merck shall manufacture Commercial Supply in accordance applicable Laws and Regulatory Approvals, including without limitation cGMP (including without limitation, the cGMP requirements concerning documentation, reports and record keeping) and in accordance with the applicable specifications and other requirements, including any requirements pursuant to the Quality Agreement (as may be amended with respect to Commercial Supply) and shall apply Commercially Reasonable Efforts to provide sufficient quantities to meet market demand for Licensed Product in the Territory.

ARTICLE 9.

PATENTS AND INVENTIONS

9.1 Certification Under Drug Price Competition and Patent Restoration Act. Each Party shall immediately give written notice to the other Party of any certification of which

they become aware filed pursuant to 21 U.S.C. Article 355(b)(2)(A) (or any amendment or successor statute thereto) claiming that any Licensor Patents covering Compound or Licensed Product, or the manufacture or use of each of the foregoing, are invalid or unenforceable, or that infringement will not arise from the manufacture, use or sale of a product by a Third Party.

9.2 Listing of Patents. The JSC shall determine which of the Licensor Patents, if any, shall be listed, with respect to Licensed Products, for inclusion in the Approved Drug Products with Therapeutic Equivalence Evaluations pursuant to 21 U.S.C. Article 355, or any successor Law in the United States, together with any comparable Laws in any other country.

9.3 Further Assurances. To the extent permitted by Law and consistent with its standard business practices, each Party shall require all of its employees, and use its Commercially Reasonable Efforts to require its contractors and agents, and any Affiliates and Third Parties working on its behalf under this Agreement (and their respective employees, contractors and agents), to assign to such Party any Know-How (and Patent Rights and Non-Patent Rights therein) created, made, invented or developed in the course of performing such activities.

9.4 Inventions. In the event that the Parties create Inventions, the ownership of such Inventions shall be determined as follows: (a) Merck shall solely own all Merck Inventions and other Merck Technology, (b) Licensor shall solely own all Licensor Inventions and other Licensor Technology, (c) Joint Inventions and other Joint Technology shall be jointly owned by both Parties, with each Party owning an equal undivided interested therein. [* * *]

9.5 Patent Prosecution and Maintenance.

(a) **Licensor Patents**. Threshold shall have the first right to file, prosecute and maintain Licensor Patents. Threshold shall keep Merck informed of the course of the filing and prosecution of Licensor Patents or related proceedings (e.g. interferences, oppositions, reexaminations, reissues, revocations or nullifications) in a timely manner, and to take into consideration the advice and recommendations of Merck. Except as may be provided in the Co-commercialization Agreement, Licensor shall bear all costs and expenses of filing, prosecuting and maintaining Licensor Patents subject to Article 9.5 (h) below.

(b) **Election not to file and prosecute Licensor Patents** If Threshold elects not to file, prosecute or maintain a Licensor Patent (each, an **"Abandoned Patent"**) in any of the United States, the European Union, Japan, Australia, Brazil, Canada, China, India or Russia then (i) it shall notify Merck in writing at least ninety (90) days before any deadline applicable to the filing, prosecution or maintenance of such Licensor Patent, as the case may be, or any other date by which an action must be taken to establish or preserve such Licensor Patent in such jurisdiction, and (ii) Merck shall, at Merck's expense, have the right to file, prosecute and

maintain in whole or in part such Abandoned Patent under the name of Threshold. In such event, Threshold shall execute such documents and perform such acts at Merck's expense as may be reasonably necessary to allow Merck to continue such prosecution or maintenance.

(c) **Patent Term Extension**. Merck shall be responsible for obtaining patent term extensions (including, without limitation, supplementary protection certificates or the equivalent thereof) wherever available for Licensor Patents. Merck shall seek such extensions in consultation with Licensor. Licensor shall provide Merck free-of-charge with relevant information, documentation and reasonable assistance in this respect as may reasonably be requested by Merck. Any such assistance, supply of information and consultation shall be provided reasonably promptly and in a manner that will facilitate obtaining the applicable patent term extensions for Licensor Patents wherever legally permissible, and to the maximum extent available. In the event that any submission with respect to obtaining patent term extensions is to be made, Merck shall provide Licensor with written notice reasonably in advance of the applicable filing deadline thereof and take into account Licensor's comments. If Merck elects not to obtain a patent term extension (including, without limitation, supplementary protection certificates or the equivalent thereof) for a patent within the Licensor Patents, then Licensor shall have the right to seek and obtain such extension. If Licensor is the only Party eligible to seek a patent term extension, it shall do so in consultation with Merck. Merck shall provide Licensor free-of-charge with relevant information, documentation and reasonable assistance in this respect as may reasonably be requested by Licensor. Any such assistance, supply of information and consultation shall be provided reasonably promptly and in a manner that will facilitate obtaining the applicable patent term extensions for Licensor Patents wherever legally permissible, and to the maximum extent available.

(d) **Merck Patents**. Merck shall, at Merck's expense, file, prosecute and maintain Merck Patents subject to Article 9.5 (h) below. Notwithstanding the foregoing, Merck may elect not to file, prosecute and maintain Merck Patents in whole or part and, if so, shall notify Licensor in writing at least ninety (90) days before any deadline applicable to the filing, prosecution or maintenance of such Merck Patent, as the case may be, or any other date by which an action must be taken to establish or preserve such Merck Patent, and Threshold shall, at Threshold's expense, have the right to file, prosecute and maintain in whole or in part Merck Patents under the name of Merck. In such event, Merck shall execute such documents and perform such acts at Threshold's expense as may be reasonably necessary to allow Threshold to continue such prosecution or maintenance.

(e) **Joint Patent Rights.** Merck shall, at its expense, subject to Article 9.5(h) below, file, prosecute and maintain Joint Patents worldwide in consultation with Threshold under the names of both Merck and Threshold. Notwithstanding the foregoing, Merck may elect not to file, prosecute and maintain Joint Patents in whole or in part anywhere in the world, and, if so, shall notify Licensor in writing at least ninety (90) days before any deadline applicable to the filing, prosecution or maintenance of such Joint Patents, as the case may be, or any other date by which an action must be taken to establish or preserve such Joint Patent. In such case Licensor shall have the right to file, prosecute and maintain in whole or in part such Joint Patents.

(f) **No Assignment.** Nothing in this Article 9 shall be construed as assigning or transferring any right, title, and interest in Patent Rights of the filing Party to the non-filing Party.

(g) **General.** The filing Party shall, with respect to any Merck Patents, Threshold Patents or Joint Patents, as the case may be, for which the filing Party is responsible for the filing, prosecution and maintenance (i) give the non-filing Party an opportunity to review the text of the specification before filing, (ii) consult with the non-filing Party with respect thereto, (iii) supply the non-filing Party with a copy of the applications as filed, together with notice of its filing date and serial number, (iv) keep the non-filing Party advised of the status of the actual and prospective patent filings, (v) upon the non-filing Party's request, provide the non-filing party with advance copies of any documents related to the filing, prosecution and maintenance of such patent filings, and (vi) promptly give notice to the non-filing Party of the grant, lapse, revocation, surrender, invalidation or abandonment thereof.

(h) **Costs**. [* * *]

9.6 Enforcement of Patents.

(a) **Notice.** If either Party believes that a Licensor Patent, Merck Patent or Joint Patent is being infringed by a Third Party or if a Third Party claims that any Licensor Patent, Merck Patent or Joint Patent is invalid or unenforceable, the Party possessing such knowledge or belief shall promptly notify the other Party and provide it with details of such infringement or claim that are known by such Party.

(b) **Right to bring an Action.** Subject to Article 9.6(d), Merck shall have the exclusive right to attempt to resolve such infringement or claim, including by filing an infringement suit, defending against such claim or taking other similar action (each, an "**Action**"). At Merck's request, Licensor shall reasonably promptly provide Merck with all relevant documentation (as may be reasonably requested by Merck) evidencing that Merck is validly empowered by the Licensor to take an Action. Licensor shall be under the obligation to join Merck in its Action if Merck determines that it is necessary to demonstrate "standing to sue". If Merck does not initiate or diligently prosecute or defend an Action with respect to such an infringement or claim within one hundred and eighty (180) days following notice thereof, or such shorter period as may be required to avoid any prejudicial ruling or effect, Licensor shall have the right to attempt to resolve such infringement or claim, including by filing an Action. The Party controlling such Action shall have the sole and exclusive right to select counsel.

(c) **Costs of an Action.** Subject to Article 9.6(f) and except as may be provided in the Co-commercialization Agreement, the Party taking an Action under Article 9.6(b) shall pay all costs associated with such Action, other than the expenses of the other Party if the other Party elects to join such Action (as provided in the last sentence of this paragraph). Each Party shall have the right to join an Action relating to a Licensor Patent, Merck Patent or Joint Patent, taken by the other Party at its own expense.

[* * *]

(d) **Settlement**. Neither Party shall settle or otherwise compromise any Action (i) by admitting that any Licensor Patent, Merck Patent or Joint Patent is invalid or unenforceable, or (ii) in a way that adversely affects or would be reasonably expected to adversely affect the Parties' respective rights or benefits hereunder with respect to the Licensed Product, in each case, without the other Party's prior written consent. The settlement will be treated, for the purposes of Article 6.14 in accordance with applicable Law.

(e) **Reasonable Assistance.** The Party not enforcing or defending Licensor Patents, Merck Patents or Joint Patents shall provide reasonable assistance to the other Party, including providing access to relevant documents and other evidence and making its employees available, subject to the other Party's reimbursement of any Out-of-Pocket Expenses incurred on an on-going basis by the non-enforcing or non-defending Party in providing such assistance, and subject to appropriate arrangements to maintain any legal privilege.

(f) **Distribution of Amounts Recovered.** Any amounts recovered by the Party taking an Action pursuant to this Article 9.6, whether by settlement or judgment, shall be allocated in the following order: [* * *].

9.7 Third Party Actions Claiming Infringement.

(a) **Notice**. If a Party becomes aware of any Third Party Action, such Party shall promptly notify the other Party of all details regarding such claim or action that is reasonably available to such Party.

(b) **Right to Defend.** Subject to 9.7(f), Merck shall have the right, at its sole expense, but not the obligation, to defend a Third Party Action described in Article 9.7(a). If Merck declines or fails to assert its intention to defend such Third Party Action within [* * *] days of receipt/sending of notice under Article 9.7(a), then Licensor shall have the right, but not the obligation, to defend such Third Party Action. The Party defending such Third Party Action shall have the sole and exclusive right to select counsel for such Third Party Action.

(c) **Consultation.** The Party defending a Third Party Action pursuant to Article 9.7(b) shall be the **"Controlling Party."** The Controlling Party shall consult with the non-Controlling Party on all material aspects of the defense. The non-Controlling Party shall have a reasonable opportunity for meaningful participation in decision-making and formulation of defense strategy. The Parties shall reasonably cooperate with each other in all such actions or proceedings. The non-Controlling Party will be entitled to be represented by independent counsel of its own choice at its own expense.

(d) **Appeal**. In the event that a judgment in a Third Party Action is entered against the Controlling Party and an appeal is available, the Controlling Party shall have the first right, but not the obligation, to file such appeal. In the event the Controlling Party does not desire to file such an appeal, it will promptly, in a reasonable time period (i.e., with sufficient

time for the non-Controlling Party to take whatever action may be necessary) prior to the date on which such right to appeal will lapse or otherwise diminish, permit the non-Controlling Party to pursue such appeal at such non-Controlling Party's own cost and expense. If applicable Law requires the other Party's involvement in an appeal, the other Party shall be a nominal party of the appeal and shall provide reasonable cooperation to such Party at such Party's expense.

(e) **Costs of an Action**. The Controlling Party shall pay all costs associated with such Third Party Action other than the expenses of the other Party if the other Party elects to join such Third Party Action (as provided in the last sentence of this paragraph). Each Party shall have the right to join a Third Party Action defended by the other Party, at its own expense.

(f) **No Settlement Without Consent.** Neither Party shall settle or otherwise compromise any Third Party Action by admitting infringement or liability or in a in a way that otherwise adversely affects or would be reasonably expected to adversely affect the other Party's rights or interests without the prior written consent of the other Party.

ARTICLE 10.

CONFIDENTIALITY

10.1 Confidentiality Obligations. Each Party agrees that, for the Term and for five (5) years thereafter, such Party shall, and shall ensure that its Affiliates, Sublicensees and Third Party contractors and their respective officers, directors, employees, representatives and agents shall keep completely confidential and not publish or otherwise disclose and not use for any purpose except as expressly permitted hereunder, or as is necessary to exercise its rights and perform its obligations hereunder, any Confidential Information disclosed to it by the other Party pursuant to this Agreement. The foregoing obligations shall not apply to any Confidential Information disclosed by a Party hereunder to the extent that the receiving Party can demonstrate that such Confidential Information:

(a) was already known to the receiving Party or its Affiliates, other than under an obligation of confidentiality or restricted use, at the time of disclosure;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement;

(d) was subsequently lawfully disclosed to the receiving Party or its Affiliates by a Third Party without an obligation of confidentiality or restricted use other than in contravention of a confidentiality or restricted use obligation of such Third Party to the disclosing Party; or

(e) was developed or discovered by employees or agents of the receiving Party or its Affiliates who had no access to, and did not use, the Confidential Information of the disclosing Party.

Notwithstanding the above obligations of confidentiality and non-use, a Party may disclose information to a Third Party in connection with due diligence or to the extent that such disclosure is reasonably necessary in connection with, in each case in accordance with the terms and conditions of this Agreement:

(i) filing or prosecuting patent applications, subject to the terms of Article 9;

(ii) prosecuting or defending litigation;

(iii) conducting pre-clinical studies or Clinical Trials pursuant to this Agreement;

(iv) seeking Regulatory Approval of the Licensed Product; or

(v) complying with applicable Law, including securities Law and the rules of any securities exchange or market on which a Party's securities are listed or traded.

In making any disclosures set forth in clauses (i) through (v) above, the disclosing Party shall, where reasonably practicable, give such advance written notice to the other Party of such disclosure requirement as is reasonable under the circumstances and will reasonably cooperate with the other Party in order limit the scope of disclosure and to secure confidential treatment of such Confidential Information required to be disclosed. In addition, in connection with any permitted filing by either Party of this Agreement with any Governmental Body, included but not limited to the U.S. Securities and Exchange Commission Agreement, the filing Party shall endeavor to obtain confidential treatment of economic, trade secret information and such other information as may be requested by the other Party, and shall provide the other Party with the proposed confidential treatment request with reasonable time for such other Party to provide comments, and take into account, in good faith, all reasonable comments of the other Party.

10.2 Publications. Licensor shall not publish any information relating to the Licensed Products without the written consent of Merck (which consent not to be unreasonably withheld or delayed), unless such information has already been publicly disclosed either prior to the Effective Date or after the Effective Date through no fault of Licensor or otherwise not in violation of this Agreement, provided that Licensor may make such publications or presentations pertaining to the Sarcoma Program without the approval of Merck and further provided that Licensor has complied with Article 10.2 sentence 3 below. Merck shall have the right to make such publications as it chooses, in its sole discretion, without the approval of Licensor. Each Party shall submit to the other Party for review any publication or presentation (including, without limitation, in any seminars, symposia or otherwise) of information related directly or indirectly to the Licensed Product at least [* * *] prior to submission for the proposed date of publication or presentation and the first Party will reasonably take into account any comments received from the other Party within [* * *] after first Party's applicable submission. The foregoing sentence shall also apply to such publications from such Third Parties with whom Threshold has contractual relationships and therefore rights to review their publications as regards the Licensed Product (this includes but is not limited to publications stemming from investigator-initiated clinical trials and the like), but only if and to the extent such review is permitted under the applicable agreement with sufficient time to comply with the foregoing requirements.

10.3 Press Releases and Disclosure.

(a) Each Party shall issue a press release following the Execution Date in the form attached hereto asExhibit D-1 and Exhibit D-2, respectively.

(b) In the event that Licensor is required to issue a press release or make another public announcement to comply with applicable Law as a publicly-traded company, Licensor shall have the right to issue such press release or make such other public announcement as necessary to comply with such applicable Law, provided, however, that Licensor shall provide Merck with a copy of the proposed disclosure as soon as reasonably possible but no less than [* * *] prior to such disclosure (unless applicable Law requires earlier disclosure). Merck shall have the opportunity to review and comment such proposed disclosure and Threshold shall take such comments into account, always acknowledging that it is Threshold's responsibility to comply with applicable securities Laws. Merck shall inform its recipients of the confidential and sensitive nature of such information and ensure such recipients' compliance with applicable Law (including securities regulations). For any other disclosure, Threshold shall provide the text of such disclosure to Merck at least [* * *] prior to disclosure, and Threshold shall not make such disclosure without the prior written consent of Merck, which consent shall not be unreasonably withheld or delayed. The reciprocal procedure shall apply for press releases or public announcements of Merck within the Co-commercialization Territory, unless the Co-commercialization rights of Threshold have ceased to exist.

(c) Outside the Co-commercialization Territory Merck shall have the right to make such press releases as it chooses, in its sole discretion, without the approval of Licensor. Merck will provide Licensor with such press releases [* * *] prior to publication for information purposes.

ARTICLE 11.

REPRESENTATIONS AND WARRANTIES

11.1 Representations and Warranties. Each Party represents and warrants to the other Party that, as of the Execution Date:

(a) such Party is duly organized and validly existing under the Laws of the jurisdiction of its incorporation or organization;

(b) such Party has taken all action necessary to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement;

(c) this Agreement is a legal and valid obligation of such Party, binding upon such Party and enforceable against such Party in accordance with the terms of this Agreement, except as enforcement may be limited by applicable bankruptcy, fraudulent conveyance, insolvency, reorganization, moratorium and other laws relating to or affecting creditors' rights generally and by general equitable principles. The execution, delivery and performance of this

Agreement by such Party does not conflict with, breach or create in any Third Party the right to accelerate, terminate or modify any agreement or instrument to which such Party is a party or by which such Party is bound, and does not violate any Law of any Governmental Body having authority over such Party;

(d) such Party has all right, power and authority to enter into this Agreement, to perform its obligations under this Agreement;

(e) no consent by any Third Party or Governmental Body is required with respect to the execution and delivery of this Agreement by such Party or the consummation by such Party of the transactions contemplated hereby; and

(f) all tangible information and data provided by or on behalf of such Party to the other Party on or before the Execution Date in contemplation of this Agreement was and is true, accurate and complete in all material respects, and such Party has not failed to disclose, or cause to be disclosed, any information or data that would cause the information and data that has been disclosed to be misleading in any material respect.

11.2 Additional Representations and Warranties of Licensor. Licensor represents and warrants to Merck, as of the Execution Date that:

(a) No claims have been asserted, or, to Licensor's Knowledge, threatened in writing by any Person against Licensor, (i) challenging the validity, effectiveness, or ownership of Licensor Technology, and/or (ii) alleging that the use, reproduction, modification, manufacturing, distribution, licensing, sublicensing, sale or any other exercise of rights in any of Licensor Technology infringes any intellectual property right of any Person.

(b) to the Knowledge of Licensor, there is no unauthorized use, infringement or misappropriation of any of Licensor Technology by any employee or former employee of Licensor, or any other Third Party;

(c) the Licensor Patents are not the subject of any litigation procedure, discovery process, interference, reissue, reexamination, opposition, appeal proceedings or any other legal dispute (other than ongoing patent prosecution), and no claims have been asserted, or, to Licensor's Knowledge, threatened in writing by any Person against Licensor, alleging that any Licensor Patent is invalid or unenforceable;

(d) Licensor has not licensed to a Third Party the right to develop the Compound or Licensed Product;

(e) it has the full right to provide to Merck the Licensor Material to be provided to Merck pursuant to this Agreement;

(f) Licensor is not party to an agreement with a Third Party which licenses rights to Licensor that are necessary for the Development, manufacture and Commercialization of a Licensed Product.

(g) all employees of Licensor who have performed any activities on its behalf in connection with research regarding the Compound have entered into Licensor's standard invention assignment agreements assigning to Licensor, to the extent permitted by Law, the whole of their rights in any intellectual property made, discovered or developed by them in the course of their employment as a result of such research;

(h) Licensor has all right, title and interest in and to the Licensor Technology, Licensor has not previously licensed, assigned, transferred, or otherwise conveyed any right, title or interest in and to the Licensor Technology to any Third Party in a manner that would conflict with the rights and licenses granted under this Agreement;

(i) as of the Execution Date, Licensor has no Knowledge of the unblinded results of the Phase II Pancreatic Cancer Trial.

ARTICLE 12.

TERM AND TERMINATION

12.1 Term and Expiration. The term of this Agreement (the **"Term"**) shall commence on the Effective Date and, unless earlier terminated as provided in this Article 12, shall continue in full force and effect, on a country-by-country and Licensed Product by Licensed Product basis until the Royalty Term in such country with respect to such Licensed Product expires, at which time this Agreement shall expire in its entirety with respect to such Licensed Product in such country and the terms of Article 12.5(b)(i) shall apply.

12.2 Termination by Merck upon Non-Achievement of [* * *]. If the [* * *] is not achieved with respect to [* * *] and if the [* * *] milestone has occurred and has been invoiced by Licensor, Merck shall have the right to terminate the Agreement with immediate effect by giving notice no later than [* * *] after such confirmation [* * *].

12.3 Termination of the Agreement by Merck for Convenience. Without limiting Merck's rights under Article 12.2, at any time during the Term, but only after (i) the [* * *] and the [* * *] have occurred, and (ii) [* * *] has occurred, and Merck has paid the corresponding milestone payments and all fees and milestone payments previously accrued, Merck may, at its convenience, terminate this Agreement in its entirety upon ninety (90) days' prior written notice to Licensor.

12.4 Termination upon Material Breach and Challenge.

(a) If a Party breaches any of its material obligations under this Agreement, the Party not in default may give to the breaching Party a written notice specifying the nature of the default, requiring it to cure such breach, and stating its intention to terminate this Agreement if such breach is not cured within [* * *]. If such breach is not cured within sixty (60) days after the receipt of such notice, the Party not in default shall be entitled to terminate this Agreement immediately by written notice to the other Party.

(b) Any dispute regarding an alleged material breach of this Agreement shall first be attempted to be resolved in accordance with Article 15 hereof, before the affected Party

pursues other remedies (including termination). In the event that the Party that has allegedly materially breached this Agreement disputes such breach, and the resulting termination of this Agreement in good faith, then any consequences of termination in this Article 12 shall only apply from and after such time as such termination has been upheld in a final judgement from which no appeal can be taken, or that is unappealed within the time allowed for appeal or such time as the Party allegedly in material breach is no longer disputing such termination.

(c) In the event that a Party has the right to terminate this Agreement for uncured material breach by the other Party, then such first Party may elect not to terminate this Agreement and shall have the right to pursue the other rights and remedies it may have hereunder or at Law or in equity with respect to any breach of this Agreement and pursue its right to obtain performance of any obligation.

(d) Licensor may immediately terminate this Agreement if Merck or any of its Affiliates challenges the validity, enforceability, or ownership of any Licensor Patents in any legal proceeding anywhere in the world (including any invalidity, opposition, reexamination, review, revocation, or similar proceeding in any court or patent office).

12.5 Effects of termination.

(a) **Survival.**

(i) Without limiting the foregoing, ARTICLE 1 (Definitions), ARTICLE 13 (Indemnification and Insurance), ARTICLE 15 (Dispute Resolution) and ARTICLE 16 (Miscellaneous Provisions), and Articles 2.7 (No Implied Licenses), 4.10 (Sharing of Development Expenses) (solely with respect to payment obligations outstanding as of the effective date of termination), 4.11 (Recording and Cost of Personnel) (solely with respect to record keeping), 4.12 (Review of Development Expenses) (solely with respect to cooperation in verifying amounts under this Agreement, 4.13 (Reimbursement of Excess Development Expenses) (solely with respect to reimbursement obligations outstanding as of the effective date of termination), 4.18 (Audit Rights), 6.8 (Timing of Payment), 6.9 (Mode of Payment and Currency), 6.10 (Royalty Reports and Records Retention), 6.11 (Late Payments), 6.12 (Audits), 6.13 (Taxes), 9.3 (Further Assurances), 9.4 (Inventions), 9.5(f) (No Assignment), 10.1 (Confidentiality Obligations) and 12.5 (Effects of Termination) hereof shall survive the expiration or termination of this Agreement for any reason.

(ii) Termination of this Agreement shall not relieve the Parties of any liability that accrued hereunder prior to or as of the effective date of such termination. In addition, termination of this Agreement shall not preclude either Party from pursuing all rights and remedies it may have hereunder or at Law or in equity with respect to any breach of this Agreement nor prejudice either Party's right to obtain performance of any obligation.

(b) **Licenses**

(i) Upon expiration of the Royalty Term with respect to any Licensed Product, then as of the effective date of such expiration and on a Licensed Product-by-Licensed Product and country-by-country basis, the license from Licensor to Merck under Article 2.1 shall continue, but become [* * *].

(ii) Upon termination of this Agreement by Merck pursuant to Article 12.2, 12.3 or Article 12.4:

(1) all rights and licenses granted to Merck under this Agreement shall terminate;

(2) Merck shall, upon written request by Licensor and subject to Licensor assuming legal responsibility for any Clinical Trials of the Licensed Product then ongoing, transfer to Licensor at Licensor's cost and expense, all regulatory documentation and Regulatory Approvals prepared or obtained by or on behalf of Merck prior to the date of such termination, to the extent solely related to Licensed Products and transferable, and Merck shall have the right to retain one copy of such transferred documentation and Regulatory Approvals for record-keeping purposes;

(3) Merck shall, upon written request of Licensor, return to Licensor or, at Licensor's option, destroy, at Merck's cost and expense in case of termination according to Articles 12.2 and 12.3 and at Licensor's cost and expense in case of termination according to Article 12.4, all relevant records and materials in its possession or control containing or comprising the Licensor Know-How and the Licensor Materials, or such other Confidential Information of Licensor, and Merck shall have the right to retain one copy of such Licensor Know-How and one sample of Licensor Materials and such other Confidential Information of Licensor solely if and to the extent required to comply with applicable Laws.

(4) Merck may, at its sole option and discretion, (i) destroy any and all chemical, biological or physical materials relating to or comprising the Licensed Products, including Clinical Supply of Licensed Products, that are Controlled by Merck, or (ii) [* * *] . Any Clinical Supply of Licensed Products or other materials purchased by Licensor from Merck pursuant to the foregoing shall be purchased on an "as is" basis with no representations or warranties.

(5) To the extent not prohibited by Law, Merck shall wind down any ongoing Clinical Trials with respect to the Licensed Product, or at Licensor's option, transfer such Clinical Trials to Licensor at Licensor's cost and expense, in which case Licensor shall purchase from Merck then existing stock [* * *]. If Licensor requests such transfer, then Merck shall promptly (i) provide copies to Licensor of any Merck Know-How and Merck Materials in Merck's Control that are used by Merck, and necessary for Licensor to

continue, such Merck Development activities, (ii) at Licensor's request, exercise reasonable efforts to transfer to Licensor any Third Party sub-contract agreements entered into by the Merck relating to the Merck Development activities, and (iii) provide reasonable assistance in connection with the transfer to Licensor of such Merck Development activities all of the foregoing at Licensor's cost and expense in case of termination in accordance with Article. 12.4.

(6) Merck and its Affiliates and Sublicensees shall be entitled, during the [* * *] period following such termination, to sell any then-existing inventory of Commercial Supply of Licensed Products which remains on hand as of the date of the termination, so long as Merck pays to Licensor the royalties and other payments applicable to said subsequent sales in accordance with the terms and conditions set forth in this Agreement, but on a non-exclusive basis. Any commercial inventory remaining following such [* * *] period shall be destroyed at Merck's cost and expense and in accordance with Law in case of termination according to Articles 12.2 and 12.3 and at Licensor's cost and expense in case of termination according to Article 12.4.

(7) Effective upon such termination, Merck hereby grants to Licensor and its Affiliates (subject to Article 16.3) a worldwide, royalty-free, fully paid up, irrevocable, non-transferable (except pursuant to Article 16.2) right and license (with the right to sublicense) under the Merck Technology to develop, make, have made, import, export, use, sell, offer for sale, and otherwise commercialize Licensed Products in the Field in the Territory. Notwithstanding the foregoing, in the event of termination by Merck under Article 12.4, such license may be subject to a reasonable royalty to be agreed by the Parties (provided that Licensor has the option not to take such license).

(8) Effective upon such termination Merck shall assign to Licensor all regulatory filings and Regulatory Approvals relating to the Licensed Product and the Product Marks together with all related intellectual property rights and goodwill (but excluding any marks or rights with respect to Merck's corporate name or other products of Merck). Notwithstanding the foregoing, in the event of termination by Merck under Article 12.4, such license may be subject to a reasonable royalty to be agreed by the Parties (provided that Licensor has the option not to take such license).

(iii) Upon termination of this Agreement by Licensor pursuant to Article 12.4, the provisions of 12.5(b)(ii) above shall apply, except for Article 12.5(b)(ii)(6) and provided that (A) Licensor shall have the right to purchase existing inventory of Clinical Supply and Commercial Supply at Merck's Cost of Goods without any markup, (B) the activities pursuant to Articles 12.5(b)(ii)(3), 12.5(b)(ii)(4) and 12.5(b)(ii)(5) shall be at Merck's expense.

(iv) Upon any termination of this Agreement, all Sublicensees shall automatically terminate.

12.6 Termination on Bankruptcy or Insolvency. All rights and licenses granted under or pursuant to this Agreement by Licensor are, and shall otherwise be deemed to be, for purposes of Article 365(n) of the U.S. Bankruptcy Code, if applicable, licenses of right to

"intellectual property" as defined under Article 101 of the U.S. Bankruptcy Code. The Parties agree that Merck, as licensor of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against Licensor under the U.S. Bankruptcy Code, Merck shall be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, which, if not already in Merck's possession, shall be promptly delivered to it (a) upon any such commencement of a bankruptcy proceeding upon Merck's written request therefor, unless Licensor elects to continue to perform all of its obligations under this Agreement or (b) if not delivered under clause (a), following the rejection of this Agreement by Licensor upon written request therefor by Merck.

ARTICLE 13.

INDEMNIFICATION AND INSURANCE

13.1 Indemnification by Merck. Merck shall indemnify, defend and hold Licensor and its Affiliates and each of their respective employees, officers, directors and agents (the "**Licensor Indemnitees**") harmless from and against any and all liability, damage, loss, cost or expense (including reasonable attorneys' fees) to the extent arising out of Third Party claims or suits related to (a) Merck's performance or non-performance or breach of its obligations and activities under this Agreement; or (b) breach by Merck of its representations or warranties set forth in Article 11; provided, however, that Merck's obligations pursuant to this Article 13.1 shall not apply (i) to the extent such claims or suits result from the negligence or willful misconduct of any of the Licensor Indemnitees, or (ii) with respect to claims or suits arising out of breach by Licensor of its representations, warranties or covenants set forth in Article 11.

13.2 Indemnification by Licensor. Licensor shall indemnify, defend and hold Merck and its Affiliates and each of their respective agents, employees, officers and directors (the "**Merck Indemnitees**") harmless from and against any and all liability, damage, loss, cost or expense (including reasonable attorney's fees) to the extent arising out of Third Party claims or suits related to (a) Licensor's performance or non-performance or breach of its obligations and activities under this Agreement; or (b) breach by Licensor of its representations, warranties or covenants set forth in Article 11; provided, however, that Licensor's obligations pursuant to this Article 13.2 shall not apply (i) to the extent that such claims or suits result from the negligence or willful misconduct of any of the Merck Indemnitees or (ii) with respect to claims or suits arising out of a breach by Merck of its representations or warranties set forth in Article 11.

13.3 No Consequential Damages. IN NO EVENT SHALL EITHER PARTY OR ANY OF ITS AFFILIATES BE LIABLE TO THE OTHER PARTY OR ANY OF ITS AFFILIATES FOR SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING LOSS OF PROFITS, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREIN OR ANY BREACH HEREOF. THE FOREGOING DOES NOT LIMIT A PARTY'S INDEMNIFICATION OBLIGATIONS PURSUANT TO ARTICLE 12 WITH RESPECT TO THIRD PARTIES.

13.4 Notification of Claims; Conditions to Indemnification Obligations. As a condition to a Party's right to receive indemnification under this Article 13, it shall (a) promptly notify the other Party as soon as it becomes aware of a claim or suit for which indemnification may be sought pursuant hereto, (b) cooperate, and cause the individual indemnitees to cooperate, with the indemnifying Party in the defense, settlement or compromise of such claim or suit, and (c) permit the indemnifying Party to control the defense, settlement or compromise of such claim or suit, including the right to select defense counsel. In no event, however, may the indemnifying Party compromise or settle any claim or suit in a manner which admits fault or negligence on the part of the indemnified Party or any indemnitee without the prior written consent of the indemnified Party. The indemnifying Party shall have no liability under this Article 13 with respect to claims or suits settled or compromised by the other Party without its prior written consent, such consent not to be unreasonably withheld or delayed.

13.5 Insurance. During the Term, each Party shall obtain and maintain, at its sole cost and expense, product liability insurance (including any self-insured arrangements) in amounts, that are reasonable and customary in the pharmaceutical and biotechnology industry for companies engaged in comparable activities. It is understood and agreed that this insurance shall not be construed to limit either Party's liability with respect to its indemnification obligations hereunder. Each Party will, except to the extent self insured, provide to the other Party upon request a certificate evidencing the insurance such Party is required to obtain and keep in force under this Article 13.5.

ARTICLE 14.

HSR MATTERS

14.1 HSR Filings. Each of Licensor and Merck shall as promptly as possible, and not later than twenty one (21) days of the Execution Date file with the FTC and the Antitrust Division of the DOJ, any HSR Filing required of it under the HSR Act with respect to the transactions contemplated by this Agreement. The Parties shall cooperate with one another to the extent necessary in the preparation of any HSR Filing required to be filed under the HSR Act. Each Party shall be responsible for its own costs, expenses, and filing fees associated with any HSR Filing.

14.2 HSR Cooperation; Further Assurances. Licensor and Merck agree, and shall cause each of their respective Affiliates, to cooperate and to use their respective commercially reasonable efforts to obtain any HSR Clearance required for the consummation of the transactions contemplated under this Agreement, to request early termination of the applicable waiting period under the HSR Act (if HSR Clearance is required) and to respond to any government requests for information under the HSR Act. The Parties will consult and cooperate with one another, and consider in good faith the views of one another, in connection with any analyses, appearances, presentations, memoranda, briefs, arguments, opinions and proposals made or submitted by or on behalf of either Party in connection with proceedings under or relating to the HSR Act. Each of Licensor and Merck shall (i) promptly notify the other Party of any written communication to that Party from any the FTC or DOJ related to this Agreement or the transactions contemplated by this Agreement and, subject to applicable Law, permit the other Party to review in advance any proposed written communication to any of the foregoing, (ii) not

agree to participate, or to permit its Affiliates to participate, in any substantive meeting or discussion with the FTC or DOJ unless it consults with the other Party in advance and, to the extent permitted by such agency, gives the other Party the opportunity to attend and participate thereat, and (iii) to the extent permitted under applicable Law, furnish the other Party with copies of all correspondence, filings, and communications (and memoranda setting forth the substance thereof) between such Party, on the one hand, and the FTC or DOJ, on the other hand, with respect to this Agreement and the transactions contemplated hereby (unless the furnishing of such information would (1) violate the provisions of any applicable Laws or any confidentiality agreement or (2) cause the loss of the attorney-client privilege with respect thereto); provided, that each such Party shall use its reasonable efforts to promptly communicate to the other Party the substance of any such communication, whether by redacting parts of such material communication or otherwise, so that such communication would not violate applicable Laws or cause the loss of the attorney-client privilege with respect thereto.

14.3 HSR-Related Defined Terms.

"DOJ" means the United States Department of Justice.

"FTC" means the United States Federal Trade Commission.

"HSR Act" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (15 U.S.C. Sec. 18a), and the rules and regulations promulgated thereunder.

"HSR Clearance" means either (a) early termination of the applicable waiting period under the HSR Act with respect to the HSR Filings or (b) expiration of the applicable waiting period under the HSR Act with respect to the HSR Filings.

"HSR Clearance Date" means the earlier of (a) the date on which the FTC or DOJ shall notify Licensor and Merck of early termination of the applicable waiting period under the HSR Act or (b) the day after the date on which the applicable waiting period under the HSR Act expires.

"HSR Filings" means the filings by Merck and Licensor with the FTC and the Antitrust Division of the DOJ of a Notification and Report Form for Certain Mergers and Acquisitions (as that term is defined in the HSR Act) with respect to the matters set forth in this Agreement, together with all required documentary attachments thereto.

14.4 Termination Based on Failure to Obtain HSR Clearance. The Agreement shall immediately terminate in the event that the FTC and/or the DOJ shall obtain a permanent injunction under the HSR Act against Merck and Licensor to enjoin the transactions contemplated by this Agreement. In addition, Licensor shall have the right to terminate this Agreement upon notice to Merck if the HSR Clearance Date shall not have occurred on or prior to the date that is one hundred and twenty (120) days after the Parties' filing of any required HSR Filings, but only if Licensor has diligently supported the filing. For clarity, no payments under this Agreement shall be due if Threshold terminates in accordance with Article 14.4

ARTICLE 15.

DISPUTE RESOLUTION

15.1 Disputes The Parties recognize that disputes as to certain matters may from time to time arise during the Term which relate to either Party's rights and/or obligations hereunder. It is the objective of the Parties to establish under this Article 15 procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. In the event that the Parties are unable to resolve such dispute through diligent review and deliberation by the JSC (in accordance with Article 3.2 (i)) within [* * *] from the day that one Party had designated the issue as a dispute in written notice to the JSC, then either Party shall have the right to escalate such matter to senior management as set forth in Article 15.2.

15.2 Escalation to Executive Officers. Either Party may, by written notice to the other Party, request that a dispute that remained unresolved by the JSC for a period of [* * *] as set forth in Article 15.1 arising between the Parties in connection with this Agreement, or a dispute relating to material breach, be resolved by the Executive Officers for resolution, within [* * *] of their first consideration of such dispute. If the Executive Officers cannot resolve such dispute within [* * *] of their first consideration of such dispute, then, at any time after such [* * *] period, either Party may proceed to enforce any and all of its rights and remedies with respect to such dispute. Notwithstanding the foregoing, nothing in this Article 15.2 shall be construed as precluding a Party from bringing an action for injunctive relief or other equitable relief prior to the initiation or completion of the above procedure.

ARTICLE 16.

MISCELLANEOUS PROVISIONS

16.1 Relationship of the Parties. Nothing in this Agreement is intended or shall be deemed to constitute for financial, tax, legal or other purposes a partnership, agency, joint venture or employer-employee relationship between the Parties.

16.2 Assignment.

(a) Except as expressly provided herein, neither this Agreement nor any interest hereunder shall be neither assignable, nor any other obligation delegable, by either Party without the prior written consent of the other Party (not to be unreasonably withheld or delayed). Notwithstanding the foregoing, a Party may assign this Agreement without the consent of the other Party to a successor to all or a substantial portion of the business of such Party to which this Agreement relates, in connection with any merger, sale of stock, sale of assets or other similar transaction, and subject to other applicable provisions of this Agreement. In addition, each Party shall be allowed to assign this Agreement in whole or in part to an Affiliate without the consent of the other Party.

(b) No assignment under this Article 16.2 shall relieve the assigning Party of any of its responsibilities or obligations hereunder and provided, further, that as a condition of such assignment, the assignee shall agree in writing to be bound by all obligations of the assigning Party hereunder.

(c) This Agreement shall be binding upon the successors and permitted assigns of the Parties.

(d) Any assignment not in accordance with this Article 16.2 shall be void.

16.3 Performance by Affiliates. Either Party shall have the right to have any of its obligations hereunder performed, or its rights hereunder exercised, by, any of its Affiliates and the performance of such obligations by any such Affiliate(s) shall be deemed to be performance by such Party; provided, however, that such Party shall be responsible for ensuring the performance of its obligations under this Agreement and that any failure of any Affiliate performing obligations of such Party hereunder shall be deemed to be a failure by such Party to perform such obligations.

16.4 Change of Control. In the event of a Change of Control of Licensor, Merck shall have the option to assume responsibility for the joint Development by providing written notice to Licensor within ten (10) days of receiving notice of the Change of Control. In that case:

(a) Merck shall continue Development and perform Licensor's Development activities in accordance with the Development Plan and the other terms of this Agreement;

(b) Merck shall be responsible for 100% of the Development Expenses;

(c) The JSC shall be disbanded and Merck shall become solely responsible for Development responsibilities previously assigned to Licensor and shall make the final determination with respect to any Development related matter in accordance with this Agreement [* * *]; and

(d) The Commercialization and Co-commercialization provisions and all other terms of this Agreement shall be unaffected.

16.5 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments and to do all such other acts as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

16.6 Accounting Procedures. Each Party shall calculate all amounts hereunder and perform other accounting procedures required hereunder and applicable to it in accordance either with IFRS or US GAAP depending on which accounting standard is normally applied by a Party with respect to the filing of its reporting.

16.7 Force Majeure. Neither Party shall be liable to the other Party or be deemed to have breached or defaulted under this Agreement for failure or delay in the performance of any of its obligations under this Agreement for the time and to the extent such failure or delay is caused by or results from acts of God, earthquake, riot, civil commotion, terrorism, war, strikes or other labor disputes, fire, flood, failure or delay of transportation, omissions or delays in acting by a governmental authority, acts of a government or an agency thereof or judicial orders or decrees or restrictions or any other reason which is beyond the control of the respective Party. The Party affected by force majeure shall provide the other Party with full particulars thereof as soon as it becomes aware of the same (including its best estimate of the likely extent and duration of the interference with its activities), and will use Commercially Reasonable Efforts to overcome the difficulties created thereby and to resume performance of its obligations hereunder as soon as practicable.

16.8 No Trademark Rights. Unless expressly set forth otherwise in this Agreement, no right, express or implied, is granted by this Agreement to a Party to use in any manner the name or any other trade name or trademark of the other Party in connection with the performance of this Agreement or otherwise**.**

16.9 Entire Agreement of the Parties; Amendments. This Agreement and the Schedules and Exhibits hereto, together with the Co-commercialization Term Sheet and the Co-commercialization Agreement, constitute and contain the entire understanding and agreement of the Parties respecting the subject matter hereof and cancel and supersede any and all prior negotiations, correspondence, understandings and agreements between the Parties, whether oral or written, regarding such subject matter. No waiver, modification or amendment of any provision of this Agreement shall be valid or effective unless made in a writing referencing this Agreement and signed by a duly authorized officer of each Party.

16.10 Captions. The captions to this Agreement are for convenience only, and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement.

16.11 Governing Law. This Agreement shall be governed by and interpreted in accordance with the Laws of England and Wales, excluding application of any conflict of laws principles that would require application of the Law of a different jurisdiction, and will be subject to the exclusive jurisdiction of the courts of competent jurisdiction located in London, England.

16.12 Notices and Deliveries. Any notice, request, approval or consent required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been sufficiently given if delivered in person, transmitted by facsimile (receipt verified) or by express courier service (signature required) to the Party to which it is directed at its address or facsimile number shown below or such other address or facsimile number as such Party shall have last given by notice to the other Party.

If to Merck, addressed to:

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt
Germany
Attn: Merck Serono Alliance Management
Facsimile: +49 61 51 72

With a copy to:

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt
Germany
Attn: Merck Serono Legal Department
Facsimile: +49 61 51 72 23 73

If to Licensor, addressed to:

Threshold Pharmaceuticals
170 Harbor Way, Suite 300
South San Francisco, CA 94080
USA
Attn: Vice President, Business Development
Facsimile: (650) 474-2529

With a copy to:

Morrison & Foerster
LLP 755 Page Mill Road
Palo Alto, CA 94304
USA
Attention: Stephen B. Thau
Fax: (650) 251-3745

16.13 Waiver. A waiver by either Party of any of the terms and conditions of this Agreement in any instance shall not be deemed or construed to be a waiver of such term or condition for the future, or of any other term or condition hereof. All rights, remedies, undertakings, obligations and agreements contained in this Agreement shall be cumulative and none of them shall be in limitation of any other remedy, right, undertaking, obligation or agreement of either Party.

16.14 Severability. When possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable Law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable Law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement. The Parties shall make a good faith effort to replace the invalid or unenforceable provision with a valid one which in its economic effect is most consistent with the invalid or unenforceable provision.

16.15 No Implied License. No right or license is granted to either Party hereunder by implication, estoppel, or otherwise to any Know-How, Patent Right, Non-Patent Right, or other intellectual property right owned or controlled by the other Party.

16.16 No Solicitation. During the Term, each Party agrees that neither it nor any of its Affiliates will recruit, solicit or induce any employee of the other Party that is involved in the activities conducted pursuant to this Agreement to terminate his or her employment with such other Party and become employed by or consult for such Party. For purposes of the foregoing, "recruit", "solicit" or "induce" does not include (a) circumstances where an employee of one Party initiates contact with the other Party or any of its Affiliates with regard to possible employment, or (b) general solicitations of employment not specifically targeted at employees of a Party or any of its Affiliates, including responses to general advertisements.

16.17 Rights of Third Parties. The provisions of this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and they shall not be construed as conferring any rights in any other Persons except as otherwise expressly provided in this Agreement, including, without limitation, ARTICLE 13. The Contracts (Rights of Third Parties) Act 1999 shall not apply to this Agreement. Except as expressly provided in this Agreement, including, without limitation, ARTICLE 13, no Person who is not a party to this Agreement (including any employee, officer, agent, representative or subcontractor of either Party) shall have the right (whether under the Contracts (Rights of Third Parties) Act 1999 or otherwise) to enforce any term of this Agreement which expressly or by implication confers a benefit on that Person without the express prior agreement in writing of the Parties, which agreement must refer to this Article 16.17.

16.18 Interpretation. The words "include," "includes" and "including" shall be deemed to be followed by the phrase "without limitation." All references herein to Articles, Schedules and Exhibits shall be deemed references to Articles and Schedules of, and Exhibits to, this Agreement unless the context shall otherwise require. Except as otherwise expressly provided herein, all terms of an accounting or financial nature shall be construed in accordance with IFRS, as in effect from time to time. Unless the context otherwise requires, countries shall include their territories.

16.19 Counterparts. This Agreement may be executed in one or more counterparts, each of which will be deemed an original, and all of which together will be deemed to be one and the same instrument. A facsimile or a portable document format (PDF) copy of this Agreement, including the signature pages, will be deemed an original.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed and delivered by their respective duly authorized officers as of the day and year first above written, each copy of which shall for all purposes be deemed to be an original.

THRESHOLD

By: _____
Name: Harold E. Selick, Ph.D.
Title: Chief Executive Officer

Date: _____

MERCK KGaA

By: _____
Name: Dr. Stefan Oschmann
Title: General Partner and Member of the Executive Board, Merck KGaA, President, Merck Serono

Date: _____

By: _____
Name: Jens Eckhardt
Title: Associate General Counsel
Date: _____

List of Exhibits and Schedules

Schedule 1.10(a)
Schedule 1.10(b)
Schedule 1.18
Schedule 1.97
Schedule 4.3
Schedule 4.7
Schedule 8.1
Exhibit A
Exhibit B
Exhibit C
Exhibit D-1
Exhibit D-2

Schedule 1.10(a)

[* * *]

Schedule 1.10(b)

[* * *]

Schedule 1.18

Co-Commercialization Term Sheet

The Parties shall use good faith efforts to negotiate the Co-commercialization Agreement as set forth in Section 7.5(b) of the License Agreement. When developing the Co-commercialization Agreement, the parties shall reasonably and in good faith determine the optimal contractual and financial structure consistent with the economic result contemplated herein.

[* * *]

Schedule 1.97

[* * *]

Schedule 4.3

[* * *]

Schedule 4.7

[* * *]

Schedule 8.1

[* * *]

[* * *]

Exhibit B

[* * *]

Exhibit C

[* * *]

Exhibit D-1

Press Release

Threshold Pharmaceuticals and Merck KGaA Announce Global Agreement to Co-Develop and Commercialize Phase 3 Hypoxia-Targeted Drug TH-302

- *Threshold to receive $25 million upfront, plus further potential milestones and royalties*
    - *Deal provides Threshold option to co-commercialize in the United States*
- *Phase 3 trial in soft tissue sarcoma on-going and randomized Phase II trial in patients with pancreatic cancer expected to report in February 2012*

SOUTH SAN FRANCISCO, CA – (Market Wire) February 2, 2012 – Threshold Pharmaceuticals, Inc (NASDAQ: THLD) today announced that a global agreement was signed with Merck KGaA, Darmstadt, Germany, to co-develop and commercialize TH-302, Threshold's small molecule hypoxia-targeted drug. TH-302 is currently being investigated in a global Phase 3 clinical trial in patients with soft tissue sarcoma, a randomized Phase 2 trial in patients with advanced pancreatic cancer from which top-line results are expected in February, as well as additional clinical studies in other solid tumors and hematological malignancies.

Under the terms of the agreement, Merck will receive co-development rights, exclusive global commercialization rights and will provide Threshold an option to co-commercialize the therapeutic in the United States. In exchange, Threshold will receive an upfront payment of $25 million and could receive up to $35 million in additional development milestones during 2012. Threshold is also eligible to receive a $20 million milestone payment based on positive results from its randomized Phase 2 trial in pancreatic cancer. Total potential milestone payments are $525 million, comprised of $280 million in regulatory and development milestones and $245 million in sales-based milestones.

In the United States, Threshold will have primary responsibility for development of TH-302 in the soft tissue sarcoma indication. Threshold and Merck KGaA will jointly develop TH-302 in all other cancer indications being pursued. Merck KGaA will pay 70% of worldwide development costs for TH-302.

Subject to FDA approval in the United States, Merck KGaA will initially be responsible for commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales. Under the royalty-bearing portion of the agreement, Threshold retains the option to co-promote TH-302 in the United States. Additionally, Threshold retains the option to co-commercialize TH-302 allowing the company to participate in up to 50% of the profits in the United States based on certain revenue tiers. Outside of the United States, Merck KGaA will be solely responsible for the commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales in these territories.

“The addition of TH-302 to our pipeline provides an important opportunity in several different tumor types to expand our oncology development program,” said Susan Jane Herbert, Head of Global Business Development and Strategy, Merck Serono. “Given the fact that pancreatic cancer is a very difficult to treat indication, successful Phase II results could represent important upside for our company.”

“We are excited by the new resources that our partnership is going to bring to the development of TH-302 and the expertise in clinical development and commercialization that Merck will contribute to this program,” said Barry Selick, President and CEO of Threshold. “This collaboration provides Threshold a strong and committed partner with a shared vision for TH-302.”

Morrison & Foerster LLP acted as legal counsel for Threshold in this transaction.

About TH-302

TH-302 is a hypoxia-targeted drug that is thought to be activated under tumor hypoxic conditions, a hallmark for many cancer indications. Areas of low oxygen levels (hypoxia) within tissues are common in many solid tumors due to insufficient blood vessel growth. Similarly, the bone marrow of patients with hematological malignancies has also been shown, in some cases, to be extremely hypoxic.

TH-302 has been investigated in over 550 patients in Phase I/II clinical trials to date in a broad spectrum of tumor types, both as a monotherapy and in combination with chemotherapy treatments and other targeted cancer drugs.

Threshold has several ongoing clinical trials including, but not limited to, a controlled Phase 2 trial of TH-302 in combination with gemcitabine versus gemcitabine alone in patients with advanced pancreatic cancer and a Phase 3 study evaluating TH-302 in combination with doxorubicin versus doxorubicin alone in patients with soft tissue sarcoma.

TH-302 development in soft tissue sarcoma

A Phase 3 trial of TH-302 in patients with first-line advanced soft tissue sarcoma (STS) was initiated in September, 2011, based on results from a Phase 1/2 trial investigating its use in combination with the chemotherapeutic doxorubicin. This randomized, multi-center Phase 3 trial will investigate the use of TH-302 plus doxorubicin compared with doxorubicin alone. The primary efficacy endpoint is overall survival. The study is conducted under a Special Protocol Assessment with the U.S. Food and Drug Administration. It is being run in partnership with the Sarcoma Alliance for Research through Collaboration (SARC) and aims to enroll 450 patients with metastatic or locally advanced unresectable STS.

TH-302 development in pancreatic cancer

Results from a randomized, controlled, multi-center Phase 2 trial of TH-302 in patients with first-line pancreatic cancer are expected to be announced in February 2012. This trial of 214 previously untreated patients with locally advanced unresectable or metastatic pancreatic adenocarcinoma started in June, 2010, and completed enrollment in June, 2011. Two different doses of TH-302 in combination with the chemotherapeutic gemcitabine were compared to gemcitabine alone, with progression free survival (PFS) as the primary endpoint.

Soft tissue sarcoma

Sarcomas are a group of aggressive cancers of connective tissue of the body for which there are currently limited treatment options. Soft tissue sarcomas are treated with surgery, chemotherapy and radiation. Doxorubicin as a single agent or in combination with ifosfamide are the most commonly used chemotherapeutic regimens in patients with advanced soft tissue sarcoma, but response rates are generally low and toxicity can be significant. The American Cancer Society estimates that 10,980 people were diagnosed with a soft tissue sarcoma in the United States in 2011, and approximately 3,920 people died from the disease. In Europe, it is estimated that more than 32,000 people were diagnosed with soft tissue sarcoma in 2010.

Pancreatic cancer

Pancreatic cancer is a malignant neoplasm of the pancreas with current treatment options including surgery, radiotherapy and chemotherapy. Gemcitabine as a single agent or in combination with other treatments is the most commonly used chemotherapeutic agent in patients with advanced pancreatic cancer. It is estimated that approximately 279,000 cases of pancreatic cancer were diagnosed worldwide in 2008. Pancreatic cancer is the fourth most common cause of cancer death both in the United States and internationally. The American Cancer Society estimates that 44,030 people were diagnosed with pancreatic cancer in the United States in 2011, and approximately 37,660 people died from the disease.

About Merck Serono

Merck Serono is the biopharmaceutical division of Merck KGaA, Darmstadt, Germany, a global pharmaceutical and chemical company. Headquartered in Geneva, Switzerland, Merck Serono discovers, develops, manufactures and markets prescription medicines of both chemical and biological origin in specialist indications. In the United States and Canada, EMD Serono operates as a separately incorporated affiliate of Merck Serono.

Merck Serono has leading brands serving patients with cancer (Erbitux®, cetuximab), multiple sclerosis (Rebif®, interferon beta-1a), infertility (Gonal-f®, follitropin alfa), endocrine and metabolic disorders (Saizen® and Serostim®, somatropin), (Kuvan®, sapropterin dihydrochloride), (Egrifta®, tesamorelin), as well as cardiometabolic diseases (Glucophage®, metformin), (Concor®, bisoprolol), (Euthyrox®, levothyroxine). Not all products are available in all markets.

With an annual R&D expenditure of over € 1bn, Merck Serono is committed to growing its business in specialist-focused therapeutic areas including neurodegenerative diseases, oncology, fertility and endocrinology, as well as new areas potentially arising out of research and development in rheumatology.

About Merck

Merck is a global pharmaceutical and chemical company with total revenues of € 9.3 billion in 2010, a history that began in 1668, and a future shaped by more than 40,000 employees in 67 countries. Its success is characterized by innovations from entrepreneurial employees. Merck's operating activities come under the umbrella of Merck KGaA, in which the Merck family holds an approximately 70% interest and shareholders own the remaining approximately 30%. In 1917 the U.S. subsidiary Merck & Co. was expropriated and has been an independent company ever since.

For more information, please visit www.merckserono.com or www.merckgroup.com

About Threshold Pharmaceuticals

Threshold is a biotechnology company focused on the discovery and development of drugs targeting tumor hypoxia, the low oxygen condition found in microenvironments of most solid tumors as well as the bone marrows of patients with some hematologic malignancies. For additional information, please visit the company's website: www.thresholdpharm.com.

Forward-Looking Statements

Except for statements of historical fact, the statements in this press release are forward-looking statements, including statements regarding potential payments from Merck to Threshold, development and commercialization plans for TH-302, TH-302's potential ability to treat soft tissue sarcoma and pancreatic cancer, planned clinical trials and anticipated results, and potential therapeutic uses and benefits of TH-302. These statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. Potential risks and uncertainties include, but are not limited to, Threshold's ability to accomplish milestones that will trigger payments, Threshold's and Merck's ability to enroll or complete its anticipated clinical trials, the time and expense required to conduct such clinical trials and analyze data, whether such trials confirm results from earlier trials and preclinical studies, potential side effects associated with TH-302, issues arising in the regulatory or manufacturing process and the results of such clinical trials (including product safety issues and efficacy results), and Threshold's and Merck's ability to obtain regulatory approval for the marketing of TH-302. Further information regarding these and other risks is included under the heading "Risk Factors" in Threshold's Quarterly Report on Form 10-Q, which has been filed with the Securities Exchange Commission on November 3, 2011 and is available from the SEC's website (www.sec.gov) and on our website (www.thresholdpharm.com) under the heading "Investors." We undertake no duty to update any forward-looking statement made in this news release.

Exhibit D-2

Press Release

News Release

February 2, 2012

Merck KGaA and Threshold Announce Global Agreement to Co-Develop and Commercialize Phase III Hypoxia-Targeted Drug TH-302

- **Phase III soft tissue sarcoma trial ongoing; randomized Phase II pancreatic cancer trial expected to report in February 2012**
- **Deal provides Threshold with an upfront payment of € 19 million ($25 million), plus further potential milestones and royalties as well as an option to co-commercialize in the United States**

Darmstadt, Germany, February 2, 2012 – Merck Serono, a division of Merck KGaA, Darmstadt, Germany, today announced that a global agreement was signed with Threshold Pharmaceuticals, Inc., South San Francisco, to co-develop and commercialize TH-302, Threshold's small molecule hypoxia-targeted drug. TH-302 is currently being investigated in a global Phase III clinical trial in patients with soft tissue sarcoma, a randomized Phase II trial in patients with advanced pancreatic cancer from which top-line results are expected in February, as well as additional clinical studies in other solid tumors and hematological malignancies.

Under the terms of the agreement, Merck will receive co-development rights, exclusive global commercialization rights and will provide Threshold an option to co-commercialize the therapeutic in the United States. In exchange, Threshold will receive an upfront payment of € 19 million ($25 million) and could receive up to € 26.5 million ($35 million) in additional development milestones during 2012. Threshold is also eligible to receive a € 15 million ($20 million) milestone payment based on positive results from its randomized Phase II trial in pancreatic cancer. Merck does not disclose further financial details about the agreement.

In the United States, Threshold will have primary responsibility for development of TH-302 in the soft tissue sarcoma indication. Threshold and Merck KGaA will jointly develop TH-302 in all other cancer indications being pursued. Merck KGaA will pay 70% of worldwide development costs for TH-302.

Subject to FDA approval in the United States, Merck KGaA will initially be responsible for commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales. Under the royalty-bearing portion of the agreement, Threshold retains the option to co-promote TH-302 in the United States. Additionally, Threshold retains the option to co-commercialize TH-302 allowing the company to participate in up to 50% of the profits in the United States, based

on certain revenue tiers. Outside of the United States, Merck KGaA will be solely responsible for the commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales in these territories.

“The addition of TH-302 to our pipeline provides an important opportunity in several different tumor types to expand our oncology development program,” said Susan Jane Herbert, Head of Global Business Development and Strategy, Merck Serono. “Given the fact that pancreatic cancer is a very difficult to treat indication, successful Phase II results could represent important upside for our company.”

“We are excited by the new resources that our partnership is going to bring to the development of TH-302, and the expertise in clinical development and commercialization that Merck brings to this program,” said Barry Selick, President and CEO of Threshold.

TH-302 is a hypoxia-targeted drug that is thought to be activated under tumor hypoxic conditions, a hallmark for many cancer indications. Areas of low oxygen levels (hypoxia) within tissues are common in many solid tumors due to insufficient blood vessel growth. Similarly, the bone marrow of patients with hematological malignancies has also been shown, in some cases, to be extremely hypoxic.

TH-302 has been investigated in over 550 patients in Phase I/II clinical trials to date in a broad spectrum of tumor types, both as a monotherapy and in combination with chemotherapy treatments and other targeted cancer drugs.

Threshold has several ongoing clinical trials including, but not limited to: a controlled Phase II trial of TH-302 in combination with gemcitabine versus gemcitabine alone in patients with advanced pancreatic cancer and a Phase III study evaluating TH-302 in combination with doxorubicin versus doxorubicin alone in patients with soft tissue sarcoma.

TH-302 development in soft tissue sarcoma

A Phase III trial of TH-302 in patients with first-line advanced soft tissue sarcoma (STS) was initiated in September, 2011, based on results from a Phase I/II trial investigating its use in combination with the chemotherapeutic doxorubicin. This randomized, multi-center Phase III trial will investigate the use of TH-302 plus doxorubicin compared with doxorubicin alone. The primary efficacy endpoint is overall survival. The study is conducted under a Special Protocol Assessment with the U.S. Food and Drug Administration. It is being run in partnership with the Sarcoma Alliance for Research through Collaboration (SARC) and aims to enroll 450 patients with metastatic or locally advanced unresectable STS.

TH-302 development in pancreatic cancer

Results from a randomized, controlled, multi-center Phase II trial of TH-302 in patients with first-line pancreatic cancer are expected to be announced in February, 2012. This trial of 214 previously untreated patients with locally advanced unresectable or metastatic pancreatic adenocarcinoma started in June, 2010, and completed enrollment in June, 2011. Two different doses of TH-302 in combination with the chemotherapeutic gemcitabine were compared to gemcitabine alone, with progression free survival (PFS) as the primary endpoint.

Soft tissue sarcoma

STS refers to a heterogeneous and relatively rare group of tumors that develops in the soft, supporting tissues of the body. It can occur in any of the tissues that support, surround or protect the organs of the body, such as muscle, fat, nerves, tendons and ligaments or blood vessels. It can also develop in specific organs including, for example, the uterus, stomach, skin and small bowel. Occasionally it occurs in the head and neck. Adult STS is rare, with an estimated average incidence of 4 in 100,000 cases in Europe annually.[1] In the United States, there were an estimated 10,980 new cases and 3,920 deaths from STS in 2011.[2] STS tends to occur in people over the age of 30, although certain types of sarcoma can develop more commonly in children and teenagers.[3] Current treatment options for STS include surgery, chemotherapy and radiotherapy, although response rates are generally low and side effects can be significant.

Pancreatic cancer

Pancreatic cancer is considered fairly rare, particularly in younger people. The most common symptoms are pain in the upper abdomen, weight loss, and jaundice. Current treatment options include surgery, radiotherapy and chemotherapy. It is estimated that approximately 279,000 cases of pancreatic cancer were diagnosed worldwide in 2008.[4]

References

1. Casali, PG et al on behalf of the ESMO Guidelines Working Group.*Ann Oncol*. 2010;20(4):iv132-iv136
2. National Cancer Institute. Snapshot of Sarcoma. 2011;
http://www.cancer.gov/aboutnci/servingpeople/snapshots/sarcoma.pdf. Last accessed January 13, 2011.
3. Macmillan Cancer Support:
http://www.macmillan.org.uk/Cancerinformation/Cancertypes/Softtissuesarcomas/Softtissuesarcomas.aspx
Last accessed January 16, 2011.
4. GLOBOCAN 2008. World estimated cancer incidence, all ages: both sexes.
http://globocan.iarc.fr/summary_table_pop.asp? selection=221900&title=World&age_from=1&age_to=10&sex=0&type
=0&PDF=1&window=1&sort=0&submit=%A0Execute%A0
Last accessed February 1, 2012.

About Threshold Pharmaceuticals

Threshold is a biotechnology company focused on the discovery and development of drugs targeting tumor hypoxia, the low oxygen condition found in microenvironments of most solid tumors as well as the bone marrows of patients with some hematologic malignancies. For additional information, please visit the company's website: www.thresholdpharm.com.

About Merck Serono

Merck Serono is the biopharmaceutical division of Merck KGaA, Darmstadt, Germany, a global pharmaceutical and chemical company. Headquartered in Geneva, Switzerland, Merck Serono discovers, develops, manufactures and markets prescription medicines of both chemical and biological origin in specialist indications. In the United States and Canada, EMD Serono operates as a separately incorporated affiliate of Merck Serono.

Merck Serono has leading brands serving patients with cancer (Erbitux®, cetuximab), multiple sclerosis (Rebif®, interferon beta-1a), infertility (Gonal-f®, follitropin alfa), endocrine and

metabolic disorders (Saizen® and Serostim®, somatropin), (Kuvan®, sapropterin dihydrochloride), (Egrifta®, tesamorelin), as well as cardiometabolic diseases (Glucophage®, metformin), (Concor®, bisoprolol), (Euthyrox®, levothyroxine). Not all products are available in all markets.

With an annual R&D expenditure of over € 1bn, Merck Serono is committed to growing its business in specialist-focused therapeutic areas including neurodegenerative diseases, oncology, fertility and endocrinology, as well as new areas potentially arising out of research and development in rheumatology.

About Merck

Merck is a global pharmaceutical and chemical company with total revenues of € 9.3 billion in 2010, a history that began in 1668, and a future shaped by more than 40,000 employees in 67 countries. Its success is characterized by innovations from entrepreneurial employees. Merck's operating activities come under the umbrella of Merck KGaA, in which the Merck family holds an approximately 70% interest and shareholders own the remaining approximately 30%. In 1917 the U.S. subsidiary Merck & Co. was expropriated and has been an independent company ever since.

For more information, please visit www.merckserono.com or www.merckgroup.com

Exhibit 31.1

CERTIFICATION

I, Harold E. Selick, certify that:

1. I have reviewed this Form 10-Q 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: May 3, 2012

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

Exhibit 31.2

CERTIFICATION

I, Joel A. Fernandes, certify that:

1. I have reviewed this Form 10-Q 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: May 3, 2012

/s/ Joel A. Fernandes

Joel A. Fernandes
Vice President, Finance and Controller
(Principal Financial and 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 Quarterly Report of Threshold Pharmaceuticals, Inc (the "Company") on Form 10-Q for the quarter ended March 31, 2012, 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: May 3, 2012

/s/ Harold E. Selick
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 Quarterly Report of Threshold Pharmaceuticals, Inc (the "Company") on Form 10-Q for the quarter ended March 31, 2012, 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: May 3, 2012

/s/ Joel A. Fernandes
Joel A. Fernandes
Vice President, Finance and Controller

(Principal Financial and Accounting Officer)