

**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 June 30, 2017

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**  
(State or other jurisdiction of  
incorporation or organization)

**94-3409596**  
(I.R.S. Employer  
Identification No.)

**3705 Haven Avenue, Suite 120, Menlo Park, CA 94025**  
(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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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

On July 28, 2017, there were 71,591,918 shares of common stock, par value \$0.001 per share, of Threshold Pharmaceuticals, Inc. outstanding.

---

Threshold Pharmaceuticals, Inc.

TABLE OF CONTENTS

	<u>Page</u>
PART I.	<a href="#">FINANCIAL INFORMATION</a>
Item 1.	<a href="#">Unaudited Condensed Consolidated Financial Statements</a> 3
	<a href="#">Unaudited Condensed Consolidated Balance Sheets</a> 3
	<a href="#">Unaudited Condensed Consolidated Statements of Operations and Comprehensive Loss</a> 4
	<a href="#">Unaudited Condensed Consolidated Statements of Cash Flows</a> 5
	<a href="#">Notes to Unaudited Condensed Consolidated Financial Statements</a> 6
Item 2.	<a href="#">Management’s Discussion and Analysis of Financial Condition and Results of Operations</a> 14
Item 3.	<a href="#">Quantitative and Qualitative Disclosures About Market Risk</a> 22
Item 4.	<a href="#">Controls and Procedures</a> 22
PART II.	<a href="#">OTHER INFORMATION</a>
Item 1	<a href="#">Legal Proceedings</a> 23
Item 1A.	<a href="#">Risk Factors</a> 23
Item 2.	<a href="#">Unregistered Sales of Equity Securities and Use of Proceeds</a> 54
Item 3.	<a href="#">Defaults Upon Senior Securities</a> 54
Item 4.	<a href="#">Mine Safety Disclosures</a> 54
Item 5.	<a href="#">Other Information</a> 54
Item 6.	<a href="#">Exhibits</a> 55
	<a href="#">SIGNATURES</a> 56
	<a href="#">EXHIBIT INDEX</a> 57

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

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

	June 30, 2017	December 31, 2016 (Note 1)
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 16,468	\$ 10,551
Marketable securities, current	300	13,000
Notes receivable	4,000	—
Prepaid expenses and other current assets	93	623
Total current assets	<u>20,861</u>	<u>24,174</u>
Property and equipment, net	—	109
Total assets	<u>\$ 20,861</u>	<u>\$ 24,283</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 319	\$ 822
Collaboration payable	—	129
Accrued clinical and development expenses	246	777
Accrued liabilities	<u>1,915</u>	<u>888</u>
Total current liabilities	2,480	2,616
Warrant liability	1,494	1,743
Deferred rent	—	36
Total liabilities	<u>3,974</u>	<u>4,395</u>
Commitments and contingencies (Note 7)		
Stockholders' equity:		
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: 71,591,918 shares at June 30, 2017 and 71,560,294 shares at December 31, 2016	72	72
Additional paid-in capital	374,278	373,352
Accumulated other comprehensive loss	—	(2)
Accumulated deficit	<u>(357,463)</u>	<u>(353,534)</u>
Total stockholders' equity	<u>16,887</u>	<u>19,888</u>
Total liabilities and stockholders' equity	<u>\$ 20,861</u>	<u>\$ 24,283</u>

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Revenue	\$ 3,000	\$ —	\$ 3,000	\$ —
Operating expenses:				
Research and development	1,115	4,016	2,705	10,021
General and administrative	1,687	1,892	4,540	4,141
Total operating expenses	<u>2,802</u>	<u>5,908</u>	<u>7,245</u>	<u>14,162</u>
Income (loss) from operations	198	(5,908)	(4,245)	(14,162)
Interest income (expense), net	34	40	67	72
Other income (expense), net	913	(996)	249	(626)
Net income (loss)	1,145	(6,864)	(3,929)	(14,716)
Other comprehensive income (loss):				
Unrealized gain (loss) on available-for-sale securities	(1)	4	(2)	26
Comprehensive income (loss)	<u>\$ 1,144</u>	<u>\$ (6,860)</u>	<u>\$ (3,931)</u>	<u>\$ (14,690)</u>
Net income (loss) per share:				
Basic	<u>\$ 0.02</u>	<u>\$ (0.10)</u>	<u>\$ (0.05)</u>	<u>\$ (0.21)</u>
Diluted	<u>\$ 0.02</u>	<u>\$ (0.10)</u>	<u>\$ (0.05)</u>	<u>\$ (0.21)</u>
Weighted average number of shares used in net income (loss) per share calculations:				
Basic	71,592	71,511	71,584	71,500
Diluted	71,621	71,511	71,584	71,500

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)

	Six Months Ended	
	June 30,	
	2017	2016
<b>Cash flows from operating activities:</b>		
Net loss	\$ (3,929)	\$ (14,716)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	25	305
Gain on sale of property and equipment	(21)	(51)
Stock-based compensation expense	919	1,645
Change in common stock warrant fair value	(249)	626
Changes in operating assets and liabilities:		
Collaboration receivable/payable	(129)	970
Prepaid expenses and other assets	530	1,305
Accounts payable	(503)	2,351
Accrued clinical and development expenses	(531)	(4,737)
Accrued liabilities	1,027	(2,653)
Deferred rent	(36)	(44)
Net cash used in operating activities	<u>(2,897)</u>	<u>(14,999)</u>
<b>Cash flows from investing activities:</b>		
Issuance of promissory notes to Molecular Templates, Inc.	(4,000)	—
Purchases of marketable securities	(299)	(13,454)
Proceeds from sale of property and equipment	100	61
Proceeds from maturities of marketable securities	13,006	31,192
Net cash provided by investing activities	<u>8,807</u>	<u>17,799</u>
<b>Cash flows from financing activities:</b>		
Proceeds from issuance of common stock and warrants	7	13
Net cash provided by financing activities	<u>7</u>	<u>13</u>
Net increase in cash and cash equivalents	<u>5,917</u>	<u>2,813</u>
Cash and cash equivalents, beginning of period	10,551	9,589
Cash and cash equivalents, end of period	<u>\$ 16,468</u>	<u>\$ 12,402</u>

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 using its expertise in the tumor microenvironment to discover and develop therapeutic agents that selectively target tumor cells for the treatment of patients living with cancer. The Company has no commercial products, and the Company announced at the end of 2015 that its lead product candidate, evofosfamide, a novel, hypoxia-activated prodrug of a bis-alkylating agent, did not meet its primary endpoint of demonstrating a statistically significant improvement in two pivotal Phase 3 clinical trials. In 2016, the Company engaged a financial and strategic advisor to explore a range of alternatives to enhance stockholder value, including but not limited to business combination and/or partnership opportunities, as well as a distribution of a significant amount of cash to stockholders, and dissolution of the Company. In March 2017, the Company entered into a definitive agreement for a merger with Molecular Therapeutics, Inc. See Note 3 regarding this transaction.

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for pursuant to the requirements of the Securities and Exchange Commission (“SEC”) 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 only of normal recurring adjustments necessary for the fair presentation 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. 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, 2016 included in the Company’s Annual Report on Form 10-K filed with the SEC on March 27, 2017.

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.

In March 2016, the FASB issued an accounting standard update, which simplifies several aspects of the accounting for share-based payments, including immediate recognition of all excess tax benefits and deficiencies in the income statement, changing the threshold to qualify for equity classification up to the employees’ maximum statutory tax rates, allowing an entity-wide accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures as they occur, and clarifying the classification on the statement of cash flows for the excess tax benefit and employee taxes paid when an employer withholds shares for tax-withholding purposes. The Company adopted the standard effective January 1, 2017 and the adoption did not have a material effect on its condensed consolidated financial statement.

In November 2015, the FASB issued an accounting standard update for the presentation of deferred income taxes. Under this new guidance, deferred tax liabilities and assets should be classified as noncurrent in a classified balance sheet. The update is effective for the Company beginning in the first quarter of fiscal year 2017 with early adoption permitted as of the beginning of an interim or annual reporting period. Additionally, this guidance may be applied either prospectively or retrospectively to all periods presented. We adopted the standard in the first quarter of 2017 and it did not have a material impact to our consolidated financial statements.

***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 during three months ended June 30, 2017 was related to its asset transfer and related license agreement (the "Asset Transfer Agreement") with OBI Pharma Inc. ("OBI"), which was entered into on May 31, 2017 for our preclinical candidate TH-3424. The Asset Transfer Agreement with OBI provided for nonrefundable payments to the Company upon the transfer of the Company's rights and obligation to OBI for TH-3424. The Company completed the transfer of its rights and obligations related to TH-3424 to OBI on June 16, 2017 and has no further obligations under the Asset Transfer Agreement. The Company recognized 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.

## NOTE 2 — NET INCOME (LOSS) PER SHARE

Basic net income (loss) per common share is computed by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted net (income) loss per share is computed by giving effect to all potential dilutive common shares, including outstanding options and warrants.

Potential dilutive common shares also include the dilutive effect of the common stock underlying in-the-money stock options and warrants that were calculated based on the average share price for each period using the treasury stock method. Under the treasury stock method, the exercise price of an option or warrant is assumed to be used to repurchase shares in the current period. In addition, the average amount of compensation cost for in-the-money options, if any, for future service that the Company has not yet recognized when the option is exercised, is also assumed to repurchase shares in the current period. A reconciliation of the numerator and denominator used in the calculation is as follows (in thousands, except per share amounts):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
<b>Numerator:</b>				
Net income (loss)	\$ 1,145	\$ (6,864)	\$ (3,929)	\$ (14,716)
<b>Denominator:</b>				
Weighted average common shares outstanding - basic	71,592	71,511	71,584	71,500
Dilutive effect of equity incentive awards	29	—	—	—
Weighted-average common shares outstanding and dilutive potential common shares — diluted	71,621	71,511	71,584	71,500
Net income (loss) per share:				
Basic	\$ 0.02	\$ (0.10)	\$ (0.05)	\$ (0.21)
Diluted	\$ 0.02	\$ (0.10)	\$ (0.05)	\$ (0.21)

The following outstanding warrants, options and purchase rights under the Company's 2004 Employee Stock Purchase Plan ("2004 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):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Shares issuable upon exercise of warrants	8,300	8,300	8,300	8,300
Shares issuable upon exercise of stock options	10,542	11,635	10,732	11,635
Shares issuable related to the 2004 Purchase Plan	21	42	21	42

### **NOTE 3 — MERGER AGREEMENT WITH MOLECULAR TEMPLATES**

In March 2017, the Company entered into a definitive Merger Agreement (“Merger Agreement”), with Molecular Templates, Inc. (“Molecular Templates”), a private company incorporated and registered in the United States and the shareholders of Molecular Templates, pursuant to which the shareholders of Molecular Templates will become the majority owners of the Company. The number of shares of common stock of the Company to be issued in respect of each Molecular Templates share will be based upon the relative stipulated values of each of the Company and Molecular Templates as determined pursuant to the Merger Agreement. The stipulated value of the Company is subject to downward adjustment based upon the Company’s net cash balance at the closing of the transaction. Assuming that no such adjustment is applicable, immediately following the closing of the transaction, Molecular Templates equity holders are expected to own approximately 65.6% of the outstanding common stock of the Company on a fully-diluted basis. Consummation of the transaction is subject to certain closing conditions, including, among other things, approval by the stockholders of the Company of the transactions contemplated by the Merger Agreement and related matters. The Merger Agreement contains certain termination rights for both the Company and Molecular Templates, and further provides that, upon termination of the Merger Agreement under specified circumstances, the Company may be required to pay Molecular Templates a termination fee of \$0.8 million. Any strategic transaction that is completed ultimately may not deliver the anticipated benefits or enhance shareholder value.

In connection with execution of the Merger Agreement, the Company made a bridge loan to Molecular Templates pursuant to a note purchase agreement and promissory notes (the “Notes”) up to an aggregate principal amount of \$4.0 million with an initial closing held on March 24, 2017 for a principal amount of \$2.0 million and an additional \$2.0 million at the second closing held on June 1, 2017. If the Merger Agreement is terminated prior to the maturity date, which is the one year anniversary from the signing of the note purchase agreement, of the Notes, the outstanding principal of the Notes plus all accrued and unpaid interest shall become due and payable upon the earlier of (i) the consummation of a qualified financing by Molecular Templates of at least \$10.0 million, (ii) the occurrence of a Molecular Templates liquidity event, or (iii) the four-month anniversary of the termination of the Merger Agreement, and such amounts shall be credited against any termination fees owed by the Company to Molecular Templates pursuant to the Merger Agreement.

In addition on March 16, 2017, the Company and Molecular Templates received from Longitude Venture Partners III, L.P. (“Longitude”) an Equity Commitment Letter (the “Commitment Letter”), pursuant to which, immediately following the Closing of the Merger, Longitude will purchase \$20 million of equity securities in the Company. Longitude’s investment is subject to certain conditions, including the Closing of the Merger and the Company having secured commitments from additional investors for the purchase of an additional \$20 million of such securities (the “Financing”). Subsequent to the execution of the merger agreement, Threshold and Molecular have obtained equity commitment letters in a form substantially similar to the equity commitment letter with Longitude from additional investors for an additional \$20.0 million, such that the aggregate size of the concurrent financing is expected to be approximately \$40.0 million. The Financing will be accomplished in a private placement exempt from registration under Section 4(a)(2) and Regulation D under the Securities Act of 1933, as amended (the “Securities Act”), and the rules promulgated thereunder. The closing of the Merger is not contingent upon the completion of this Financing.

Furthermore, on June 23, 2017, the Company and Molecular Templates entered into a stock purchase agreement with Millennium Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Ltd. (“Takeda”), pursuant to which Takeda will purchase approximately \$20.0 million of shares of common stock of the combined company at a (pre-reverse split) purchase price per share of approximately \$0.61 per share, provided that Takeda’s investment amount will be reduced to the extent its beneficial ownership post-closing would exceed 19.0% of the total outstanding shares of the combined company. Such transaction will be a private placement and is referred to herein as the Takeda equity financing. The closing of the Takeda equity financing is conditioned upon the closing of the merger and the concurrent financing, as well as certain other conditions.

### **NOTE 4 — AGREEMENT WITH OBI PHARMA**

On May 31, 2017, the Company, and OBI, entered into an Asset Transfer Agreement pursuant to which the Company agreed to sell to OBI certain rights to TH-3424. The assets purchased by OBI pursuant to the Asset Transfer Agreement included certain specified intellectual property (the “Assigned Intellectual Property”), as well as assumed contracts and documentation, in each case, related to TH-3424. In connection with the sale of TH-3424, OBI also assumed certain liabilities and obligations of the Company arising out of or related to certain of the assumed contracts. In addition, the Company granted to OBI a non-exclusive, nontransferable, fully paid-up license of certain of its intellectual property rights for use by OBI in the development of TH-3424. The transfer to OBI of the Threshold’s rights and obligations was completed on June 16, 2017. Pursuant to the Asset Transfer Agreement, OBI paid the Company \$3.0 million. The Company immediately recognized the \$3.0 million of non-refundable payments as revenue as the Company had no further obligations under the Asset Transfer Agreement upon the completion of the transfer of its rights and obligations to OBI. Under the Asset Transfer Agreement, the Company will be entitled to reacquire its rights from OBI for no consideration if OBI breaches its payment obligations under the Agreement.



**NOTE 5 — STOCKHOLDERS' EQUITY**

**Common Stock Warrant Valuation**

The Company accounts for its common stock warrants under guidance 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 requires 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 statements of operations.

At both June 30, 2017 and December 31, 2016 the Company had warrants outstanding to purchase 8.3 million shares of common stock, having an exercise price of \$3.62 per share, which warrants were issued by the Company in the Company's February 2015 public offering of common stock and warrants. The fair value of these warrants on June 30, 2017 and December 31, 2016 was determined using a Black-Scholes model with the following key level 3 inputs:

	June 30, 2017	December 31, 2016
Risk-free interest rate	1.55 %	1.93 %
Expected life (in years)	2.64	3.13
Dividend yield	—	—
Volatility	147 %	135 %
Stock price	\$ 0.39	\$ 0.44

During the three and six months ended June 30, 2017 the change in fair value of \$0.9 million and \$0.2 million, respectively, of noncash income related to the February 2015 warrants was recorded as other income (expense) in the Company's consolidated statement of operations.

The following table sets forth the Company's financial liabilities, related to warrants issued in the February 2015 offering, subject to fair value measurements as of June 30, 2017 and December 31, 2016:

(in thousands)	Fair Value as of June 30, 2017	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
February 2015 warrants	\$ 1,494	\$ —	\$ —	\$ 1,494

  

(in thousands)	Fair Value as of December 31, 2016	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
February 2015 warrants	1,743	—	—	1,743

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, 2016	\$ 1,743
Change in fair value of common stock warrants during six months ended June 30, 2017	(249)
Balance at June 30, 2017	\$ 1,494

## NOTE 6 — STOCK BASED COMPENSATION

The Company recognizes stock-based compensation in accordance with ASC 718, “Compensation—Stock Compensation.” Stock-based compensation expense, which consists of the compensation cost for employee stock options and the 2004 Purchase Plan, and the value of options issued to non-employees for services rendered, was allocated to research and development and general and administrative expenses in the unaudited consolidated statements of operations for the three and six months ended June 30, 2017 and 2016 as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Amortization of stock-based compensation:				
Research and development	\$ 143	\$ 306	\$ 294	\$ 624
General and administrative	271	496	625	1,021
	<u>\$ 414</u>	<u>\$ 802</u>	<u>\$ 919</u>	<u>\$ 1,645</u>

### 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 ratably 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 2004 Purchase Plan was estimated using the following weighted-average assumptions for the three and six months ended June 30, 2017 and 2016:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Employee Stock Options:				
Risk-free interest rate	—	1.08 %	—	1.60 %
Expected term (in years)	—	5.27	—	5.97
Dividend yield	—	—	—	—
Volatility	—	109 %	—	108 %
Weighted-average fair value of stock options granted	—	\$ 0.30	—	\$ 0.44
	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Employee Stock Purchase Plan (ESPP):				
Risk-free interest rate	0.56 %	0.56 %	0.56 %	0.56 %
Expected term (in years)	1.24	1.24	1.24	1.24
Dividend yield	—	—	—	—
Volatility	161 %	161 %	161 %	161 %
Weighted-average fair value of ESPP purchase rights	\$ 0.22	\$ 0.22	\$ 0.22	\$ 0.22

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 utilized the historical volatility of the Company’s common stock. 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 \$0.4 million and \$0.9 million of stock-based compensation expense related to stock options and purchase rights under the Company’s equity incentive plans and 2004 Purchase Plan for the three and six months ended June 30, 2017 and \$0.8 million and \$1.6 million of stock-based compensation for the three and six months ended June 30, 2016. As of June 30, 2017, the total unrecognized compensation cost related to unvested stock-based awards granted to employees under the Company’s equity incentive plans was approximately \$2.4 million before forfeitures. This cost will be recorded as compensation expense on a ratable basis over the remaining weighted average requisite service period of approximately 2.1 years.

## Equity Incentive Plans

**Equity Incentive Plans** At June 30, 2017, 1,754,229 shares were authorized and available for issuance under the 2014 Equity Incentive Plan.

The following table summarizes stock option activity under the Company's equity incentive plans:

Options	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2016	10,941,745	\$ 3.00	—	—
Granted	—	\$ —	—	—
Exercised	—	\$ —	—	—
Forfeitures	(209,485)	\$ 1.37	—	—
Outstanding at June 30, 2017	10,732,260	\$ 3.03	4.91	\$ 2,730
Vested and expected to vest June 30, 2017	10,689,426	\$ 3.04	4.89	\$ 2,730
Exercisable at June 30, 2017	8,640,234	\$ 3.38	4.07	\$ 2,730

No stock options were exercised during the six months ended June 30, 2017. The Company issues new shares of common stock upon exercise of options. As there were no exercises, there was no tax benefit realized by the Company.

**2004 Employee Stock Purchase Plan** On January 1, 2017, an additional 100,000 shares was authorized for issuance under the 2004 Purchase Plan pursuant to the annual automatic increase to the authorized shares under the 2004 Purchase Plan. For the six months ended June 30, 2017, plan participants had purchased 31,624 shares at an average purchase price of \$0.25 for total cash proceeds of \$7,000. At June 30, 2017, 203,165 shares were authorized and available for issuance under the 2004 Purchase Plan.

## NOTE 7 —MARKETABLE SECURITIES AND FAIR VALUE

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.

*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. For Level 2 securities that have market prices from multiples sources, a "consensus price" or a weighted average price for each of these securities can be derived from a distribution-curve-based algorithm which includes market prices obtained from a variety of industrial standard data providers (e.g. Bloomberg), security master files from large financial institutions, and other third-party sources. Level 2 securities with short maturities and infrequent secondary market trades are typically priced using mathematical calculations adjusted for observable inputs when available.

The following table sets forth the Company's financial assets (cash equivalents and marketable securities) at fair value on a recurring basis as of June 30, 2017 and December 31, 2016:

(in thousands)	Fair Value as of June 30, 2017	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Money market funds	\$ 14,103	\$ 14,103	\$ —	\$ —
Commercial paper	299	—	299	—
<b>Total cash equivalents and marketable securities</b>	<b>\$ 14,402</b>	<b>\$ 14,103</b>	<b>\$ 299</b>	<b>\$ —</b>

(in thousands)	Fair Value as of December 31, 2016	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Money market funds	\$ 2,746	\$ 2,746	\$ —	\$ —
Corporate debt securities	4,206	—	4,206	—
Government securities	5,299	—	5,299	—
Commercial paper	10,966	—	10,966	—
<b>Total cash equivalents and marketable securities</b>	<b>\$ 23,217</b>	<b>\$ 2,746</b>	<b>\$ 20,471</b>	<b>\$ —</b>

The Company invests in highly-liquid, investment-grade securities. The following is a summary of the Company's available-for-sale securities at June 30, 2017 and December 31, 2016:

As of June 30, 2017 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	\$ 14,103	\$ —	\$ —	\$ 14,103
Commercial paper	299	—	—	299
	14,402	—	—	14,402
Less cash equivalents	14,103	—	—	14,103
<b>Total marketable securities</b>	<b>\$ 299</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 299</b>

As of December 31, 2016 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	\$ 2,746	\$ —	\$ —	\$ 2,746
Corporate debt securities	4,208	—	(2)	4,206
U.S. Government securities	5,299	1	(1)	5,299
Commercial paper	10,966	—	—	10,966
	23,219	1	(3)	23,217
Less cash equivalents	10,217	—	—	10,217
<b>Total marketable securities</b>	<b>\$ 13,002</b>	<b>\$ 1</b>	<b>\$ (3)</b>	<b>\$ 13,000</b>

There were no realized gains or losses in the three and six months ended June 30, 2017 and 2016, respectively. As of June 30, 2017, the weighted average maturity for the Company's available for sale securities was less than 1.0 month, with the longest maturity being July 2017.

The Company does not intend to sell the investments that are in an unrealized loss position, and it is unlikely that the Company will be required to sell the investments before recovery of their amortized cost basis, which may be maturity. There were no marketable securities with unrealized losses at June 30, 2017.

The Company determined the fair value of the liability associated with its February 2015 warrants to purchase in aggregate 8.3 million shares of outstanding common stock using a Black-Scholes Model. See detailed discussion in Note 4 — Stockholders' Equity.

## NOTE 7 — COMMITMENTS AND CONTINGENCIES

### *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 June 30, 2017.

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," "will," "may," "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 implementation of our business strategies, including our ability to pursue development pathways and regulatory strategies for evofosfamide (formerly TH-302);
- our ability to advance the development of our product candidates;
- our plans to pursue discussions with regulatory authorities, and the anticipated timing, scope and outcome of related regulatory actions or guidance;
- our ability to establish and maintain potential new partnering or collaboration arrangements for the development and commercialization of evofosfamide and tarloxotinib bromide or tarloxotinib (formerly referred to as TH-4000, PR610 or Hypoxin™);
- our financial condition, including our ability to obtain the funding necessary to advance the development of our product candidates;
- the anticipated progress of our product candidate development programs, including whether our ongoing and potential future clinical trials will achieve clinically relevant results;
- our ability to generate data and conduct analyses to support the regulatory approval of our product candidates;
- our ability to establish and maintain intellectual property rights for our product candidates;
- whether any product candidates that we are able to commercialize are safer or more effective than other marketed products, treatments or therapies;
- our ability to discover and develop additional product candidates suitable for clinical testing;
- our ability to identify, in-license or otherwise acquire additional product candidates and development programs;
- our anticipated research and development activities and projected expenditures;
- our ability to complete preclinical and clinical testing successfully for new product candidates, such as tarloxotinib, that we may develop or license;
- our ability to have manufactured active pharmaceutical ingredient, or API, and drug product that meet required release and stability specifications;
- our ability to have manufactured sufficient supplies of drug product for clinical testing and commercialization;
- our ability to obtain licenses to any necessary third-party intellectual property;
- our ability to retain and hire necessary employees and appropriately staff our development programs;
- the sufficiency of our cash resources; and
- our projected financial performance.

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 "Risk Factors" section in Part II, Item 1A of this quarterly report on Form 10-Q. Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements reflect our view only as of the date of this report. You should read this report completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify our forward-looking statements by our cautionary statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons that actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

## Overview

We are a clinical-stage biopharmaceutical company that has historically used our expertise in the tumor microenvironment to discover and develop therapeutic and diagnostic agents that selectively target tumor cells for the treatment of patients living with cancer. Most recently, the Company has devoted substantially all of its research, development, clinical efforts and financial resources to its two therapeutic product candidates based on hypoxia-activated prodrug technology in the clinic: evofosfamide and tarloxotinib; and to a lesser extent its imaging agent product candidate: [18F]-HX4. In December 2015, we announced topline results from two pivotal Phase 3 clinical trials of evofosfamide: TH-CR-406 conducted by Threshold in patients with soft tissue sarcoma and MAESTRO conducted by Merck KGaA, Darmstadt, Germany (“Merck KGaA”), in patients with advanced pancreatic cancer; and that neither trial met its primary endpoint of demonstrating a statistically significant improvement in overall survival. Of particular note based on the data from the September 1, 2015 cut-off date for the MAESTRO trial, a meaningful improvement in overall survival was reported for a subgroup of 123 Asian patients (enrolled at Japanese and South Korean sites) in which the risk of death was reduced by 48 percent for patients on the treatment arm compared to patients on the control arm. The hazard ratio (“HR”) for this subgroup was 0.52 (95% confidence interval (or “CI”): 0.32 – 0.85). In particular and based upon Merck KGaA’s MAESTRO data, the 116 patients from Japan from the treatment arm had a median overall survival of 13.6 months versus 9.1 months for those patients on the control arm with significant improvements in progression free survival, objective response rates, and reductions in the pancreatic cancer biomarker, CA19-9. No new safety findings were identified in the MAESTRO study and the safety profile was consistent with that previously reported in other studies of evofosfamide plus gemcitabine. Based on the results of our analyses, we discussed potential registration pathways with Japan’s Pharmaceuticals and Medical Devices Agency (“PMDA”). In March 2017, we received minutes from the Company’s formal meeting with the PMDA indicating that the Company’s analysis of the data from the randomized Phase III study, EMR200592-001 (N=693), conducted under a Special Protocol Agreement with the FDA, and the data from the supporting randomized Phase II study, TH-CR-404 (N=214), would not provide adequate efficacy data to support the submission of a New Drug Application (“NDA”) for evofosfamide for the treatment of patients with locally advanced unresectable or metastatic pancreatic adenocarcinoma previously untreated with chemotherapy. We are currently in discussions with the PMDA to clarify the scope of a new Phase 3 clinical trial for which the PMDA would consider necessary to accept a NDA for evofosfamide in Japan based on the previous results observed in the Japanese sub-population. Our current evofosfamide development strategy is limited to the Company-sponsored Phase I clinical trial of evofosfamide in combination with immune checkpoint antibodies in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center, initiated in March 2017 and investigator-sponsored clinical trials of evofosfamide in combination with antiangiogenic therapies in a variety of tumor types as described in more detail below under “Our Product Candidates in Part 1 Item 1. Business Section.”

Our second product candidate, tarloxotinib, was a prodrug designed to selectively release a covalent (irreversible) EGFR tyrosine kinase inhibitor under hypoxic conditions. In September 2016, the Company announced that its Phase 2 proof-of-concept trial evaluating tarloxotinib bromide for the treatment of patients with mutant EGFR-positive, T790M-negative advanced non-small cell lung cancer (NSCLC) progressing on an EGFR tyrosine kinase inhibitor (TH-CR-601) did not achieve its primary interim response rate endpoint. While the Company’s other Phase 2 proof-of-concept trial evaluating tarloxotinib bromide for the treatment of patients with recurrent or metastatic squamous cell carcinomas of the skin met its primary interim response rate endpoint, the other two arms of the study, evaluating tarloxotinib bromide for the treatment of patients with recurrent or metastatic squamous cell carcinomas of the head and neck did not achieve their primary interim response rate endpoint, and the overall results from the two trials didn’t meet the activity thresholds required to justify further development investment by the Company. Accordingly, no further clinical development of HX4 is planned. In May 2017, Threshold returned its rights to tarloxotinib to The University of Auckland.

Following the announcement of the evofosfamide clinical trial results, our board of directors commenced a process of evaluating strategic alternatives to maximize stockholder value. To assist with this process, our board of directors engaged a financial advisory firm to help explore our available strategic alternatives, including possible mergers and business combinations, a sale of part or all of our assets, collaboration and licensing arrangements and/or equity and debt financings.

In March 2017, we entered into a definitive Merger Agreement (“Merger Agreement”), with Molecular Templates, Inc. (“Molecular Templates”), a private company incorporated and registered in the United States and the shareholders of Molecular Templates, pursuant to which the shareholders of Molecular Templates will become the majority owners of our Company. The number of shares of our common stock to be issued in respect of each Molecular Templates share will be based upon the relative stipulated values of each of the Company and Molecular Templates as determined pursuant to the Merger Agreement. The stipulated value of the Company is subject to downward adjustment based upon our net cash balance at the closing of the transaction. Assuming that no such adjustment is applicable, immediately following the closing of the transaction, Molecular Templates equity holders are expected to own approximately 65.6% of the outstanding our common stock on a fully-diluted basis. Consummation of the transaction is subject to certain closing conditions, including, among other things, approval by the stockholders of the Company of the transactions contemplated by the Merger Agreement and related matters. The Merger Agreement contains certain termination rights for both us and Molecular Templates, and further provides that, upon termination of the Merger Agreement under specified circumstances, we may be required to pay Molecular Templates a termination fee of \$0.8 million. Any strategic transaction that is completed ultimately may not deliver the anticipated benefits or enhance shareholder value.

In connection with execution of the Merger Agreement, we made a bridge loan to Molecular Templates pursuant to a note purchase agreement and promissory notes (the "Notes") up to an aggregate principal amount of \$4.0 million with an initial closing held on March 24, 2017 for a principal amount of \$2.0 million and an additional \$2.0 million at the second closing held on June 1, 2017. If the Merger Agreement is terminated prior to the maturity date, which is the one year anniversary from the signing of the note purchase agreement, of the Notes, the outstanding principal of the Notes plus all accrued and unpaid interest shall become due and payable upon the earlier of (i) the consummation of a qualified financing by Molecular Templates of at least \$10.0 million, (ii) the occurrence of a Molecular Templates liquidity event, or (iii) the four-month anniversary of the termination of the Merger Agreement, and such amounts shall be credited against any termination fees owed by us to Molecular Templates pursuant to the Merger Agreement.

In addition on March 16, 2017, the Company and Molecular Templates received from Longitude Venture Partners III, L.P. ("Longitude") an Equity Commitment Letter (the "Commitment Letter"), pursuant to which, immediately following the Closing of the Merger, Longitude will purchase \$20 million of equity securities in the Company. Longitude's investment is subject to certain conditions, including the Closing of the Merger and the Company having secured commitments from additional investors for the purchase of an additional \$20 million of such securities (the "Financing"). Subsequent to the execution of the merger agreement, Threshold and Molecular have obtained equity commitment letters in a form substantially similar to the equity commitment letter with Longitude from additional investors for an additional \$20.0 million, such that the aggregate size of the concurrent financing is expected to be approximately \$40.0 million. The Financing will be accomplished in a private placement exempt from registration under Section 4(a)(2) and Regulation D under the Securities Act of 1933, as amended (the "Securities Act"), and the rules promulgated thereunder. The closing of the Merger is not contingent upon the completion of this Financing.

Furthermore, on June 23, 2017, the Company and Molecular Templates entered into a stock purchase agreement with Millennium Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Ltd. ("Takeda"), pursuant to which Takeda will purchase approximately \$20.0 million of shares of common stock of the combined company at a (pre-reverse split) purchase price per share of approximately \$0.61 per share, provided that Takeda's investment amount will be reduced to the extent its beneficial ownership post-closing would exceed 19.0% of the total outstanding shares of the combined company. Such transaction will be a private placement and is referred to herein as the Takeda equity financing. The closing of the Takeda equity financing is conditioned upon the closing of the merger and the concurrent financing, as well as certain other conditions.

On May 31, 2017, the Company, and OBI, entered into an Asset Transfer Agreement pursuant to which the Company agreed to sell to OBI certain rights to TH-3424. The assets purchased by OBI pursuant to the Asset Transfer Agreement included certain specified intellectual property (the "Assigned Intellectual Property"), as well as assumed contracts and documentation, in each case, related to TH-3424. In connection with the sale of TH-3424, OBI also assumed certain liabilities and obligations of the Company arising out of or related to certain of the assumed contracts. In addition, the Company granted to OBI a non-exclusive, nontransferable, fully paid-up license of certain of its intellectual property rights for use by OBI in the development of TH-3424. The transfer to OBI of the Threshold's rights and obligations was completed on June 16, 2017. Pursuant to the Asset Transfer Agreement, OBI paid the Company \$3.0 million. The Company immediately recognized the \$3.0 million of non-refundable payments as revenue as the Company had no further obligations under the Asset Transfer Agreement upon the completion of the transfer of its rights and obligations to OBI. Under the Asset Transfer Agreement, the Company will be entitled to reacquire its rights from OBI for no consideration if OBI breaches its payment obligations under the Agreement.

If the Merger is not completed, we will reconsider strategic alternatives and could pursue one of the following courses of action:

- **Pursue another strategic transaction.** The Company may resume the process of evaluating a potential strategic transaction.
- **Develop evofosfamide.** Threshold may continue to focus on developing evofosfamide and/or HX4 and broadening Threshold's pipeline by in-licensing or acquiring new product candidates. Threshold is currently in ongoing discussions with the PMDA to clarify the scope of a new clinical trial for which the PMDA would consider necessary to accept a JNDA for evofosfamide in Japan based on the previous results observed in the Japanese sub-population in the Phase 3 MAESTRO clinical trial. In addition, Threshold is in the process of completing its analyses of the available biomarker data from the Phase 3 MAESTRO trial in patients with pancreatic cancer with the goal of identifying additional subgroups of patients that may benefit from treatment with evofosfamide and gemcitabine. In parallel, Threshold intends to complete the Phase I clinical trial of evofosfamide in combination with immune checkpoint antibodies in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center and several ISTs. Threshold's ability to advance the clinical development of evofosfamide is dependent upon its ability to obtain additional funding, including entering into new collaborative or partnering arrangements for evofosfamide, TH-1338, TH-2556 and/or HX4. In this regard, Threshold sold its rights to TH-3424 to OBI Pharma Inc. in June 2017 and is currently seeking diagnostic partners for TH-1338, TH-2556 and HX4 with a commercial presence in oncology. Subject to its ability to obtain additional funding, Threshold also intends to evaluate opportunities with academic institutions or pharma- and biopharmaceutical companies to potentially in-license or acquire new product candidates.



- **Dissolve and liquidate the Company's assets.** If, for any reason, the Merger does not close, the board of directors currently intends to attempt to complete another strategic transaction like the Merger. If the Board cannot complete another strategic transaction in a reasonable period of time or decides to no longer continue to pursue the development of evofosfamide or to partner HX4, then the Board intends to sell or otherwise dispose of the Company's various assets. If the board of directors determines to sell or otherwise dispose of the Company's various assets, any remaining cash proceeds would be distributed to its stockholders. In that event, the Company would be required to pay all of its debts and contractual obligations, and to set aside certain reserves for potential future claims, and there would be no assurances as to the amount or timing of available cash remaining to distribute to stockholders after paying its obligations and setting aside funds for reserve.

We were incorporated in October 2001 and we have devoted substantially all of our resources to research and development of our product candidates, principally evofosfamide and tarloxotinib. We have not generated any revenue from the commercial sales of our product candidates, and since inception we have funded our operations through the private placement and public offering of equity securities and through payments received under our former collaboration with Merck KGaA. As of June 30, 2017 and December 31, 2016, we had cash, cash equivalents and marketable securities of \$16.8 million and \$23.6 million, respectively. The cash, cash equivalents and marketable securities as of June 30, 2017 excludes a \$4.0 million bridge loan to Molecular Templates, Inc. in the form of promissory notes. We currently have no ongoing collaborations for the development and commercialization of evofosfamide, and no further source of revenue. However, Threshold continues to seek out new TH-1338, TH-2556 and/or HX4 in-licensing opportunities for Threshold and funding for those opportunities. If these efforts are not successful, Threshold may be unable to continue as a going concern.

Subject to our ability to obtain additional funding and to otherwise advance the development of evofosfamide, we expect to devote resources to research and development in future periods as we potentially start additional clinical trials on our own or with a potential future strategic partner or collaborator. While we expect to incur additional research and development expenses in the absence of additional funding as a result of the recently initiated Phase 1 clinical trial of evofosfamide in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center, research and development expenses are expected to decrease in 2017 compared to 2016 primarily as a result of Merck KGaA's and our decision to cease further joint development of evofosfamide, our decision to limit further development of evofosfamide to the recently initiated Phase 1 clinical trial of evofosfamide in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center; our decision to cease further development of tarloxotinib, our decision to sell TH-3424 to OBI Pharma, Inc. and, to a lesser extent, the impact of workforce reductions implemented in December 2015 and in September 2016. However, apart from the Phase 1 clinical trial of evofosfamide, we cannot currently predict whether and to what extent we may continue or increase product candidate development activities in future periods, if at all, and what our future cash needs may be for any such activities.

We believe that our cash, cash equivalents and marketable securities will be sufficient to fund our projected operating requirements for the next twelve months based upon current operating plans and spending assumptions as a standalone company. However, we will need to raise substantial additional capital to meaningfully advance the clinical development of evofosfamide, whether through new collaborative, partnering or other strategic arrangements or otherwise, and to in-license or otherwise acquire and develop additional product candidates or programs. In particular, our ability to meaningfully advance the clinical development of evofosfamide is dependent upon our ability to enter into new partnering, collaborative or other strategic arrangements for evofosfamide, or to otherwise obtain sufficient additional funding for such development, particularly since we are no longer eligible to receive any further milestone payments or other funding from Merck KGaA for evofosfamide, including the 70% of worldwide development costs for evofosfamide that were previously borne by Merck KGaA. If we are unable to secure additional funding on a timely basis or on terms favorable to us, we may be required to cease or reduce certain development projects, to conduct additional workforce reductions, 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.

## Results of Operations

**Revenue.** For each of the three and six months ended June 30, 2017, we recognized \$3.0 million in revenue, compared to no revenue for each of the three and six months ended June 30, 2016, respectively. Revenue for the three and six months ended June 30, 2017 related to the receipt of non-refundable upfront and milestone payments in aggregate of \$3.0 million from our Asset Transfer Agreement with OBI for the sale of TH-3424. We immediately recognized the \$3.0 million of non-refundable payments as revenue as we had no further obligations under the Asset Transfer Agreement upon the completion of the transfer of our rights and obligations to OBI. We expect no further revenue from Asset Transfer Agreement with OBI.

**Research and Development.** Research and development expenses were \$1.1 million for the three months ended June 30, 2017 compared to \$4.0 million for the three months ended June 30, 2016 net of the reimbursement for Merck KGaA's 70% share of total wind down expenses for joint evofosfamide development activities. The \$2.9 million decrease in expenses was due primarily to a \$0.8 million decrease in employee related expenses (including a \$0.2 million decrease in noncash stock-based stock compensation expense), a \$1.8 million decrease in clinical development expenses net of the reimbursement for Merck KGaA's 70% share of total wind down expenses for joint evofosfamide development activities, and a decrease of \$0.3 million in consulting expenses. Research and development expenses were \$2.7 million for the six months ended June 30, 2017 compared to \$10 million for the six months ended June 30, 2016, net of the reimbursement for Merck KGaA's 70% share of total development expenses for evofosfamide. The \$7.3 million decrease in expenses was due primarily to a \$1.7 million decrease in employee related expenses (including a \$0.3 million decrease in noncash stock-based stock compensation expense), a \$5.1 million decrease in clinical development expenses net of the reimbursement for Merck KGaA's 70% share of total wind down expenses for joint evofosfamide development activities, and a decrease of \$0.5 million in consulting expenses. The decrease in employee related expenses was primarily due to the reductions in workforce of 43 employees in clinical development and discovery research in December 2015 and September 2016. As a result of the termination of our former collaboration with Merck KGaA, we are no longer entitled to any reimbursement for evofosfamide development expenses apart from Merck KGaA's 70% reimbursement obligation for costs to wind down the discontinued trials and return the evofosfamide rights back to us through December 31, 2016.

During the three and six months ended June 30, 2017 and 2016, we were engaged in three primary research and development programs: the development of evofosfamide, which was the subject of two pivotal Phase 3 clinical trials and multiple Phase 2 and Phase 1 clinical trials; the clinical development of tarloxotinib, which is subject of two Phase 2 proof of concept trials; and our discovery research program aimed at preclinical development of TH-3424. Research and development expenses consist primarily of costs of conducting clinical trials, salaries and related costs for personnel including noncash stock-based compensation, costs of clinical materials, costs for research projects and preclinical studies, costs related to regulatory filings, and facility costs. Contracting and consulting expenses are a significant component of our research and development expenses as we rely on consultants and contractors in many of these areas. The following table summarizes our research and development expenses (net of reimbursement for Merck KGaA's 70% share of total wind down expenses for joint evofosfamide development activities for three and six months ended June 30, 2016) attributable to each of our programs for each period presented:

Research and Development Expenses by Project (in thousands):	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Evofosfamide	\$ 729	\$ 2,914	\$ 1,505	\$ 7,192
Tarloxotinib	175	1,018	464	2,351
Discovery Research	211	84	736	478
Total Research and Development Expenses	\$ 1,115	\$ 4,016	\$ 2,705	\$ 10,021

Research and development expenses associated with our internally discovered compound evofosfamide were \$0.7 million and \$1.5 million for the three and six months ended June 30, 2017, respectively, and \$2.9 million and \$7.2 million for the three and six months ended June 30, 2016, respectively, in each case net of the reimbursement for Merck KGaA's 70% share of total eligible collaboration expenses for evofosfamide. The decrease of \$2.2 million and \$5.7 million during the three and six months ended June 30, 2017, respectively, compared to the same period in 2016, was due to Merck KGaA's and our joint decision to cease further development in evofosfamide in December 2015 and the related discontinuation of enrollment and closure of all company sponsored evofosfamide trials in 2016. We are currently only pursuing development of evofosfamide in a Phase 1 trial in combination with immune checkpoint antibodies in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center.

Research and developments expenses associated with tarloxotinib, were \$0.2 million and \$0.5 million for the three and six months ended June 30, 2017, respectively, compared to \$1.0 million and \$2.4 million for the three and six months ended June 30, 2016, respectively. The decrease \$0.8 million and \$1.9 million for the three and six months ended June 30, 2017, compared to the same period in 2016, was due primarily to the completion of enrollment of two Phase 2 proof-of-concept clinical trials of tarloxotinib during the quarter ended September 30, 2016. In addition, during the quarter ended September 30, 2016, we determined to cease any further development of tarloxotinib based on the interim results from the two Phase 2 proof-of-concept trials of tarloxotinib. With our decision to cease any further development of tarloxotinib, first half of 2017 expenses related to tarloxotinib were limited to winding down the two trials. Discovery research and development expenses were \$0.2 million and \$0.7 million for the three and six months ended June 30, 2017, respectively, compared to \$0.1 million and \$0.5 million for the three and six months ended June 30, 2016, respectively. With the reduction in workforce enacted in December of 2015 pursuant to which we eliminated our in-house discovery research activities, activities in 2017 were limited to preclinical development of TH-3424 with third party collaborators.

The largest component of our total operating expenses has historically been our ongoing investment in our research and development activities, primarily with respect to the development of evofosfamide. The process of conducting the clinical research necessary to obtain FDA and foreign regulatory approvals is costly, uncertain and time consuming. We consider the active management of our research and development programs to be critical to our long-term success. The actual probability of success for evofosfamide and potential future clinical product candidates may be impacted by a variety of factors, including, among others, the quality of the product candidate, early clinical data, investment in the program and the availability of adequate funding, competition, manufacturing capability and commercial viability. Furthermore, our strategy depends upon our ability to enter into potential new partnering, collaborative or other strategic arrangements with third parties to assist in the development of evofosfamide, or to otherwise obtain sufficient additional funding to permit such development. In the event we enter into partnering or collaborative arrangements for evofosfamide, the clinical trial process for a product candidate and the estimated completion date may largely be under the control of that third party and not under our control. We cannot forecast with any degree of certainty which of our current and potential future product candidates will be subject to future collaborations or how such arrangements would affect our development plans or capital requirements. In addition, the length of time required for clinical development of a particular product candidate and our development costs for that product candidate may be impacted by the scope and timing of enrollment in clinical trials for the product candidate, unanticipated additional clinical trials that may be required, future decisions to develop a product candidate for subsequent indications, and whether in the future we decide to pursue development of the product candidate with a collaborator or independently. For example, evofosfamide may have the potential to be approved for multiple indications, and we do not yet know how many of those indications we and a potential future collaborator will pursue. In this regard, the decision to pursue regulatory approval for subsequent indications will depend on several variables outside of our control, including the strength of the data generated in our prior and ongoing clinical studies and the willingness of potential collaborators to jointly fund such additional work. Furthermore, the scope and number of clinical studies required to obtain regulatory approval for each pursued indication is subject to the input of the applicable regulatory authorities, and we have not yet sought such input for all potential indications that we may elect to pursue, and even after having given such input applicable regulatory authorities may subsequently require additional clinical studies prior to granting regulatory approval based on new data generated by us or other companies, or for other reasons outside of our control.

We did not track research and development expenses by project prior to 2003, and therefore we cannot provide cumulative project expenses to date. The risks and uncertainties associated with our research and development projects are discussed more fully in the "Risk Factors" section in Part II, Item 1A of this quarterly report on Form 10-Q. As a result of the risks and uncertainties discussed in the "Risk Factors" section and above, we are unable to determine with any degree of certainty the duration and completion costs of our research and development projects, anticipated completion dates or when and to what extent we will receive cash inflows from the commercialization and sale of a product candidate, including evofosfamide. To date, we have not commercialized any of our product candidates and in fact may never do so.

**General and Administrative.** General and administrative expenses were \$1.7 million for the three months ended June 30, 2017 compared to \$1.9 million for three months ended June 30, 2016. The \$0.2 million decrease was due to a \$0.5 million decrease in employee related expenses (including a \$0.2 million decrease in noncash stock-based compensation expense), partially offset by a \$0.3 million increase in consulting expenses. Consulting expenses increased as result of an increase in legal and other consulting expenses related to the signing of the merger agreement with Molecular Templates, Inc. General and administrative expenses were \$4.5 million for the six months ended June 30, 2017 compared to \$4.1 million for six months ended June 30, 2016. The \$0.4 million increase was due to a \$1.1 million increase in consulting expenses partially offset by a \$0.7 million decrease in employee related expenses (including a \$0.4 million decrease in noncash stock-based compensation expense). Consulting expenses increased as result of an increase in legal and other consulting expenses related to the signing of the merger agreement with Molecular Templates, Inc. We currently expect our general and administrative expenses to remain flat in 2017 compared to 2016 due to an increase in merger-related consulting expenses in first half of 2017, partially offset by a decrease in employee related expenses, including facilities costs, due to the reduction in workforce in December 2015 and September 2016 and decrease in general and administrative expenses to support our decreased development activities related to evofosfamide and TH-3424.

**Interest Income (Expense), Net.** Interest income (expense), net for the three and six months ended June 30, 2017 was \$34,000 and \$67,000, respectively, compared to \$40,000 and \$72,000 of interest income for same period in 2016, respectively.

**Other Income (Expense).** Other income (expense) for the three and six months ended June 30, 2017 was noncash income of \$0.9 million and \$0.2 million, respectively, compared to noncash expense of \$1.0 million and noncash expense of \$0.6 million for the three and six months ended June 30, 2016, respectively. The noncash income during the three and six months ended June 30, 2017 was due to a decrease in the fair value of the outstanding warrants as a result of a decrease in the underlying price of the common stock during those periods. The noncash expense during the three and six months ended June 30, 2016, was due to an increase in the fair value of the outstanding warrants as a result of an increase in the underlying price of the common stock during that period.

## 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 have funded our operations primarily through private placements and public offerings of equity securities, through payments received under our former collaboration with Merck KGaA and payments received from agreement with other third parties for sale of our rights to certain preclinical candidates. We have received \$110 million in upfront and milestone payments from our former collaboration with Merck KGaA and more recently \$3.0 million in nonrefundable payments for the sale of our rights and obligations to TH-3424 to OBI. We had cash, cash equivalents and marketable securities of \$16.8 million and \$23.6 million at June 30, 2017 and December 31, 2016, respectively, available to fund operations. The cash, cash equivalents and marketable securities as of June 30, 2017 excludes a \$4.0 million bridge loan to Molecular Templates, Inc. in the form of a promissory note.

Net cash used in operating activities for the six months ended June 30, 2017 was \$2.9 million compared to net cash used in operating activities of \$15.0 million for the six months ended June 30, 2016. The decrease of \$12.1 million in cash used in operations was due to a net decrease in payments of operating cash expenses as a result of a decrease in research and development activities and \$3.0 million in proceeds received from the sale of our rights and obligations to TH-3424 to OBI.

Net cash provided by investing activities for the six months ended June 30, 2017 was \$8.8 million compared with net cash provided by investing activities of \$17.8 million for the six months ended June 30, 2016. The \$9.0 million decrease in net cash provided by investing activities was primarily due to a decrease from proceeds from maturities of marketable securities, partially offset by a decrease in purchases of marketable securities and a loan of \$4.0 million to Molecular Templates, Inc.

Net cash provided by financing activities for the six months ended June 30, 2017 and 2016 was \$7,000 and \$13,000, respectively.

We believe that our cash, cash equivalents and marketable securities will be sufficient to fund our projected operating requirements for at least the next 12 months based upon current operating plans and spending assumptions. However, we will need to raise additional capital to advance the clinical development of evofosfamide, whether through new collaborative or partnering arrangements or otherwise, and to in-license or otherwise acquire and develop additional product candidates or programs. In particular, our ability to advance the clinical development of evofosfamide is dependent upon our ability to enter into new collaborative or partnering arrangements for evofosfamide, or to otherwise obtain sufficient additional funding for such development, particularly since we are no longer eligible to receive any further milestone payments or other funding from Merck KGaA, including the 70% of worldwide development costs for evofosfamide that were previously borne by Merck KGaA.

While we have been able to fund our operations to date, we currently have no ongoing collaborations for the development and commercialization of evofosfamide, and no source of revenue, nor do we expect to generate revenue for the foreseeable future. We also do not have any commitments for future external funding. Until we can generate a sufficient amount of product revenue, which we may never do, we expect to finance future cash needs 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 and the terms upon which we are able to raise such funds have been severely harmed by the negative results reported from our two pivotal Phase 3 clinical trials of evofosfamide and our decision to discontinue development of tarloxotinib, and may in the future be adversely impacted by the uncertainty regarding the prospects for future development of evofosfamide and our ability to advance the development of evofosfamide or otherwise realize any return on our investments in evofosfamide, if at all. Our ability to raise additional funds and the terms upon which we are able to raise such funds may also be adversely affected by the uncertainties regarding our financial condition, the sufficiency of our capital resources, our ability to maintain the listing of our common stock on The NASDAQ Capital Market and recent and potential future management turnover. As a result of these and other factors, we cannot be certain that sufficient funds will be available to us on satisfactory terms, if at all. To the extent we raise additional funds by issuing equity securities, our stockholders may experience significant dilution, particularly given our currently depressed stock price, and debt financing, if available, may involve restrictive covenants. 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 our product candidates, technologies or potential markets, any of which could result in our stockholders having little or no continuing interest in our evofosfamide program as stockholders or otherwise, or which could delay or require that we curtail or eliminate some or all of our development activities or otherwise have a material adverse effect on our business, financial condition and results of operations.

On November 11, 2016, we received a notice from the staff (the “Staff”) of TheNASDAQ Stock Market LLC (“Nasdaq”) that, for the previous 30 consecutive business days, the closing bid price for the Company’s common stock was below the \$1.00 per share minimum bid price requirement for continued listing on The NASDAQ Capital Market under Nasdaq Listing Rule 5550(a)(2) (the “Bid Price Rule”). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we had 180 calendar days, or until May 10, 2017, to regain compliance with the Bid Price Rule. To regain compliance with the Bid Price Rule, the closing bid price of our common stock must be at least \$1.00 per share for a minimum of 10 consecutive business days at any time during this 180-day period. We did not regain compliance with the rule by May 10, 2017, but became eligible for an additional 180 calendar day compliance period by meeting the continued listing requirement for market value of publicly held shares and all other applicable standards for initial listing on The NASDAQ Capital Market, with the exception of the bid price requirement, and by providing written notice of our intention to cure the deficiency during the second compliance period by effecting a reverse stock split, if necessary. If we regain compliance with the Bid Price Rule, Nasdaq will provide us with written confirmation and will close the matter.

However, if it appears to the Staff that we will not be able to cure the deficiency, Nasdaq will notify us that our common stock will be subject to delisting. In the event of such a notification, we may appeal the Staff’s determination to delist its securities, but there can be no assurance the Staff would grant our request for continued listing. If we fail to meet these requirements, including the Bid Price Requirement, Nasdaq may notify us that we have failed to meet the minimum listing requirements and initiate the delisting process. If our common stock is delisted, this would, among other things, substantially impair our ability to raise additional funds to fund our operations, to advance the development of evofosfamide and/or to acquire or in-license additional product candidates or development programs, and could result in the loss of institutional investor interest and fewer development opportunities for us.

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

#### ***Obligations and Commitments***

During the six months ended June 30, 2017, 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, 2016, which we filed with Securities and Exchange Commission on March 27, 2017.

#### ***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, 2016, which we filed with the SEC on March 27, 2017.

#### ***Recent Accounting Pronouncements Not Yet Adopted***

In May 2014, the Financial Accounting Standards Board (“FASB”) issued an accounting standard update regarding revenue from customer contracts to transfer goods and services or non-financial assets unless the contracts are covered by other standards (for example, insurance or lease contracts). Under the new guidance, an entity should recognize revenue in connection with the transfer of promised goods or services to customers in an amount that reflects the consideration that the entity expects to be entitled to receive in exchange for those goods or services. In addition, the new standard requires that reporting companies disclose the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. In August 2015, the FASB deferred the effective date of the update by one year, with early adoption on the original effective date permitted. The updates are effective for us beginning in the first quarter of the fiscal year 2018. The new revenue standard may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. We plan to implement the standard in the first quarter of 2018 on a modified retrospective basis and do not anticipate that this standard will have a material impact on our revenues as we currently have no ongoing collaboration agreements. We will continue to assess the potential impacts of the standard on any new collaboration agreements.

In February 2016, the FASB issued an accounting standard update, which requires the recognition of lease assets and lease liabilities arising from operating leases in the statement of financial position. We will adopt the standard effective the first quarter of 2019 and do not anticipate that this new accounting guidance will have a material impact on our consolidated financial statements as we currently do not have long-term operating leases.

#### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements, as defined by applicable Securities and Exchange Commission regulations.

#### **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

During the six months ended June 30, 2017, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A “Quantitative and Qualitative Disclosures About Market Risk” in our annual report on Form 10-K for the year ended December 31, 2016.

#### **ITEM 4. CONTROLS AND PROCEDURES**

##### *Evaluation of disclosure controls and procedures.*

We have carried out an evaluation under the supervision and with the participation of management, including our principal executive officer and principal financial officer, of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on their evaluation as of June 30, 2017, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

##### *Changes in internal controls over financial reporting.*

There were no changes in our internal control over financial reporting during the quarter ended June 30, 2017 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 principal executive officer and principal financial officer, 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 principal executive officer and principal financial officer have concluded, based on their evaluation, that our disclosure controls and procedures were effective as of June 30, 2017 to provide reasonable assurance that the objectives of our disclosure control system were met.

## PART II. OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

On May 25, 2017, Ron Welk, a purported stockholder of Threshold, sent Threshold a demand letter and draft complaint alleging that (1) Threshold and the members of its Board of Directors, or the Board, violated Section 14(a) of the Securities Exchange Act of 1934, as amended, the Exchange Act, and Rule 14a-9 promulgated thereunder, by filing a proxy statement, which allegedly failed to disclose and/or misrepresented material information about the proposed merger with Molecular Templates, Inc., or the Merger, and (2) the members of the Board, as control persons of Threshold, violated Section 20(a) of the Exchange Act in connection with the filing of the allegedly materially deficient proxy statement. Mr. Welk demanded that Threshold provide certain corrective disclosures to the proxy statement/prospectus/information statement. On June 20, 2017, Victor Pariso, a purported stockholder of Threshold, or the Plaintiff, filed a putative class action complaint against Threshold and members of its Board in the United States District Court for the Northern District of California. This case is captioned *Pariso v. Threshold Pharmaceuticals, Inc., et al.*, Case No. 3:17-cv-03557-WHA. The complaint alleges that (1) Threshold and the members of its Board violated Section 14(a) of the Exchange Act, and Rule 14a-9 promulgated thereunder, by filing this proxy statement/prospectus/information statement, which allegedly fails to disclose and/or misrepresents material information about the proposed merger, and (2) the members of Threshold's Board of directors, as control persons of Threshold, violated Section 20(a) of the Exchange Act in connection with the filing of the allegedly materially deficient proxy statement/prospectus/information statement. The Plaintiff has asked the District Court to, among other things, (i) enjoin the defendants from proceeding with the proposed merger, (ii) rescind, to the extent already implemented, the proposed merger or grant rescissory damages, and (iii) award damages and attorneys' fees and expenses. On June 27, 2017, Threshold filed an amendment to the Form S-4 with the SEC containing certain supplemental disclosures. After the SEC declared the Form S-4 effective on June 30, 2017, Threshold filed with the SEC a final prospectus/proxy statement/information statement also containing the supplemental disclosures pursuant to Rule 424(b)(3) promulgated under the Securities Act of 1933, as amended. On July 7, 2017, Plaintiff filed a stipulation to voluntarily dismiss the Action with prejudice as to himself because he believes the supplemental disclosures mooted the claims set forth in the complaint, or the Stipulation. In voluntarily dismissing the Action, Plaintiff asked the Court to retain jurisdiction for the sole purpose of determining any potential application for an award of attorneys' fees and expenses, and to set a briefing schedule to resolve any potential fee dispute that may arise. On July 26, 2017, the District Court denied the Stipulation because the Civil Local Rules provide specific procedures, from which the District Court was not inclined to deviate, to move for an award of fees.

### ITEM 1A. RISK FACTORS

#### Risks Related to Our Business

##### *Our merger with Molecular Templates may not be consummated or may not deliver the anticipated benefits we expect.*

On March 16, 2017, Threshold entered into the merger agreement with Molecular pursuant to which the security holders of Molecular will become the majority owners of Threshold common stock. In addition, the proposed concurrent financing and Takeda equity financing are subject to certain conditions, including the closing of the merger. The merger, however, is not conditioned upon the closing of the concurrent financing or Takeda equity financing. Threshold is devoting substantially all of Threshold's time and resources to consummating the merger and the concurrent financing and Takeda equity financing; however, there can be no assurance that such activities will result in the consummation of the merger and the concurrent financing and Takeda equity financing or that such transaction will deliver the anticipated benefits or enhance stockholder value. Threshold cannot assure you that Threshold will complete the merger in a timely manner or at all. The merger agreement is subject to many closing conditions and termination rights. If the merger does not occur, Threshold's board of directors may elect to attempt to complete another strategic transaction similar to the merger and the concurrent financing. Attempting to complete another similar strategic transaction will be costly and time-consuming, and Threshold cannot make any assurances that a future strategic transaction will occur on terms that provide the same or greater opportunity for potential value to Threshold's stockholders, or at all. If Threshold is unable to close another strategic transaction and unable to successfully obtain funding for the continued development of evofosfamide and/or partner HX4, Threshold's board of directors may determine to sell or otherwise dispose of Threshold's various assets, and distribute any remaining cash proceeds to Threshold's stockholders. In that event, Threshold would be required to pay all of its debts and contractual obligations, and to set aside certain reserves for potential future claims, so Threshold can provide no assurances as to the amount or timing of available cash remaining to distribute to stockholders after paying its obligations and setting aside funds for reserves.

***Prior to September 2016, our business was almost entirely dependent on the success of evofosfamide and tarloxotinib, and we have suspended further clinical development of tarloxotinib.***

Prior to September 2016, we invested substantially all of our efforts and financial resources in the research and development of evofosfamide and tarloxotinib. In December 2015, we announced topline results from two pivotal Phase 3 clinical trials of evofosfamide: TH-CR-406 conducted by Threshold in patients with soft tissue sarcoma and MAESTRO conducted by Merck KGaA, Darmstadt, Germany (“, or Merck KGaA”), in patients with advanced pancreatic cancer; and that neither trial met its primary endpoint of demonstrating a statistically significant improvement in overall survival. In March 2017, we received minutes from the Company’s formal meeting with the PMDA indicating that the Company’s analysis of the data from the randomized Phase III study, EMR200592-001 (N=693), conducted under a Special Protocol Agreement with the FDA, and the data from the supporting randomized Phase II study, TH-CR-404 (N=214), would not provide adequate efficacy data to support the submission of a New Drug Application (“NDA”) for evofosfamide for the treatment of patients with locally advanced unresectable or metastatic pancreatic adenocarcinoma previously untreated with chemotherapy. In September, 2016, the Company announced that its Phase 2 proof-of-concept trial evaluating tarloxotinib bromide for the treatment of patients with mutant EGFR-positive, T790M-negative advanced non-small cell lung cancer(NSCLC) progressing on an EGFR tyrosine kinase inhibitor (TH-CR-601) did not achieve its primary interim response rate endpoint. We are conducting only limited evofosfamide development activities and returned its rights to tarloxotinib to The University of Auckland.

If we are unable to consummate the Merger with Molecular Templates, there can be no assurance that we will conduct drug development activities in the future. Pharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. To date, we have focused substantially all of our efforts on our research and development activities on our lead product candidate, evofosfamide. To date, we have not commercialized any products or generated any revenue from product sales. We are not profitable and have incurred losses in each year since our inception in 2001, and we do not know whether or when we will become profitable. We have only a limited operating history upon which to evaluate our business and prospects. We continue to incur significant development and other expenses related to our ongoing operations. Our net loss for the six months ended June 30, 2017 was \$3.9 million and as of June 30, 2017, we had an accumulated deficit of \$357.3 million. To date, we have financed our operations primarily through the sale of equity securities and debt facilities. The amount of our future net losses will depend, in part, on the rate of our future expenditures and our ability to obtain funding through equity and/or debt financings and strategic collaborations. It will be several years, if ever, before evofosfamide is ready for commercialization.

Our history of net losses and our expectation of future losses, together with our limited operating history, may make it difficult to evaluate our current business and predict our future performance. In addition, the net losses we incur may fluctuate significantly from quarter to quarter and year to year, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. In any particular quarter or quarters, our operating results could be below the expectations of securities analysts or investors, which could cause our stock price to decline.

***We may not be able to complete the Merger, and we may not have sufficient funds to pursue another strategic transaction similar to such merger.***

We cannot be sure that we will be able to complete the Merger in a timely manner, or at all. The Merger Agreement is subject to many closing conditions and termination rights.

If the Merger with Molecular Templates is not consummated, we may require substantial additional funding to operate.

Our future capital requirements will depend on many factors, including:

- our ability to identify and consummate a new strategic transaction for the company;
- the timing and nature of any new strategic transactions that we undertake, including, but not limited to potential joint developments or partnerships;
- whether, as a result of our strategic and financial review with a financial advisor we enter into a new partnership or business combination;
- the time and cost necessary to obtain regulatory approvals for evofosfamide and the costs of post-marketing studies that could be required by regulatory authorities;
- our ability to successfully commercialize evofosfamide;
- our ability to establish and maintain collaboration partnerships, in-license/out-license or other similar arrangements and the financial terms of such agreements;



- the costs of filing, prosecuting, maintaining, defending and enforcing any patent claims and other intellectual property rights, including litigation costs and the outcome of such litigation, including costs of defending any claims of infringement brought by others in connection with the development, manufacture or commercialization of evofosfamide or any other future product candidates; and
- the cost incurred in responding to disruptive actions by activist stockholders.

Until such time, if ever, as we can generate substantial revenue, we would need to finance our cash needs through a combination of equity offerings, debt financings, government or other third-party funding and licensing or collaboration arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through government or other third-party funding, marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us.

Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to curtail our operations.

***If we do not successfully consummate the Merger with Molecular Templates, our board of directors may decide to pursue a dissolution and liquidation of our company. In such an event, the amount of cash available for distribution to our stockholders will depend heavily on the timing of such liquidation as well as the amount of cash that will need to be reserved for commitments and contingent liabilities.***

There can be no assurance that we can successfully consummate the Merger with Molecular Templates. If the transaction is not completed, our board of directors may decide to pursue a dissolution and liquidation of our company. In such an event, the amount of cash available for distribution to our stockholders will depend heavily on the timing of such decision and, ultimately, such liquidation, since the amount of cash available for distribution continues to decrease as we fund our operations in preparation for the consummation of the transaction with Molecular Templates. Further, the Merger Agreement with Molecular Templates contains certain termination rights for each party, and provides that, upon termination under specified circumstances, we may be required to pay Molecular Templates a termination fee of \$750,000 and to reimburse certain fees and expenses incurred by Molecular Templates which would further decrease our available cash resources. If our board of directors was to approve and recommend, and our stockholders were to approve, a dissolution and liquidation of our company, we would be required under Delaware corporate law to pay our outstanding obligations, as well as to make reasonable provision for contingent and unknown obligations, prior to making any distributions in liquidation to our stockholders. Our commitments and contingent liabilities may include (i) regulatory and clinical obligations remaining under our evofosfamide trial; (ii) obligations under our employment and separation agreements with certain employees that provide for severance and other payments following a termination of employment occurring for various reasons, including a change in control of our company; and (iii) potential litigation against us, and other various claims and legal actions arising in the ordinary course of business. As a result of this requirement, a portion of our assets may need to be reserved pending the resolution of such obligations. In addition, we may be subject to litigation or other claims related to a dissolution and liquidation of our company. If a dissolution and liquidation were pursued, our board of directors, in consultation with its advisors, would need to evaluate these matters and make a determination about a reasonable amount to reserve. Accordingly, holders of our common stock could lose all or a significant portion of their investment in the event of a liquidation, dissolution or winding up of our company.

***If the merger is not completed, and we would need to raise significant capital to support our operations, and successfully develop and complete clinical trials for our existing drug candidate, or acquire and develop other products or product candidates at all or on commercially reasonable terms.***

Given the limited development of evofosfamide, our limited cash resources, and the additional capital and resources that would be required to pursue such development, if the Merger is not completed, we could be required to rely on securing a collaborative or strategic arrangement for one of our existing drug candidates to support our operations and our future development and clinical trial costs. Due to our history, limited cash resources, limited operational and management capabilities and the intense competition for pharmaceutical product candidates, even if we generate interest in a collaborative or strategic arrangement to support the further development of one of our drug candidates, we may not be able to enter into a final agreement on commercially reasonable terms, on a timely basis or at all. Proposing, negotiating and implementing an economically viable collaborative or strategic arrangement is a lengthy and complex process. As of June 30, 2017, Threshold had cash and cash equivalents totaling \$16.8 million. The cash, cash equivalents and marketable securities as of June 30, 2017 excludes a \$4.0 million bridge loan to Molecular Templates, Inc. in the form of a promissory note. Threshold believes that its current cash and cash equivalents will only be sufficient to fund its operations through the next twelve months. Threshold competes for collaborative arrangements and license agreements with the drug candidates

and technology developed by other pharmaceutical and biotechnology companies and academic research institutions. Threshold's competitors may have stronger relationships with third parties with whom they may be interested in collaborating, or which have greater financial, development and commercialization resources and/or more established histories of developing and commercializing products than Threshold. As a result, competitors may have a competitive advantage over Threshold in entering into collaborative arrangements with such third parties. In addition, even if Threshold enters into a collaborative or strategic arrangement, the arrangement may not provide Threshold with sufficient funds to support its operations and there is no assurance that its drug candidates would satisfy the development and/or clinical milestones established in the collaborative or strategic arrangement. Further, any drug candidate Threshold pursues will require additional development and regulatory efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and other non-U.S. regulatory authorities. All product candidates are subject to the risks of failure inherent in pharmaceutical product development, including the possibility that the product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities and the possibility that, due to strategic considerations, Threshold will discontinue research or development with respect to a product candidate for which it has already incurred significant expense. Even if the product candidates are approved, Threshold cannot be sure that they would be capable of economically feasible production or commercial success.

***If we do not successfully complete the Merger, we will require substantial additional funding in the event to continue our operations, and will need to curtail operations if we have insufficient capital.***

Threshold had cash and cash equivalents of \$16.8 million at June 30, 2017. The cash, cash equivalents and marketable securities as of June 30, 2017 excludes a \$4.0 million bridge loan to Molecular Templates, Inc. in the form of a promissory note. Threshold believes that its current cash and cash equivalents will only be sufficient to fund its operations through the next twelve months unless Threshold sells additional shares of its common stock through its ATM Sales Agreement or otherwise. Based on the development and clinical status of its existing drug candidates, Threshold expects its negative cash flows from operations to continue for the foreseeable future.

As such, if the Merger is not consummated, our future capital requirements will depend on many factors, including:

- our ability to identify, negotiate and consummate an alternate strategic transaction;
- our ability to secure a collaborative or licensing arrangement on commercially reasonable terms, on a timely basis or at all;
- the timing and nature of any future strategic transactions that Threshold undertake;
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the effect of competing technological and market developments; and
- the cost incurred in responding to disruptive actions by activist stockholders.

There can be no assurance that additional funds will be available when needed from any source or, if available, will be available on terms that are acceptable to us or our stockholders. As a result, if Threshold is unable complete the merger or otherwise raise funds to satisfy its capital needs on a timely basis, there can be no assurance that Threshold will be able to continue to operate its business beyond the next twelve months.

***We are substantially dependent on our remaining employees to facilitate the consummation of a Merger.***

Threshold's ability to successfully complete the merger depends in large part on Threshold's ability to retain Threshold's remaining personnel, particularly Wilfred E. Jaeger, M.D., Threshold's Interim Chief Executive Officer, Kristen Quigley, Threshold's Vice President of Clinical Operations, and Joel Fernandes, Threshold's Senior Vice President of Finance. However, despite Threshold's efforts to retain these members of Threshold's management, one or more may terminate their employment with Threshold on short notice. The loss of the services of any of these employees could potentially harm Threshold's ability to consummate the merger, as well as fulfill Threshold's reporting obligations as a public company.

## Risks Related to the Merger

*The exchange ratio is not adjustable based on the market price of the Company's common stock so the merger consideration at the closing may have a greater or lesser value than at the time the Merger Agreement was signed.*

At the effective time of the merger, outstanding shares of Molecular common stock (excluding shares held by Threshold, Molecular or Merger Sub and dissenting shares, and after giving effect to the purchase or conversion rights of Molecular's preferred stockholders, warrant holders and noteholders) will be converted into shares of Threshold common stock. Applying the exchange ratio, the former Molecular security holders immediately before the merger are expected to own approximately 65.6% of the aggregate number of shares of Threshold common stock following the merger, and the Threshold stockholders immediately before the merger are expected to own approximately 34.4% of the aggregate number of shares of Threshold common stock following the merger, in each case without giving effect to the issuance of shares of Threshold common stock in the concurrent financing and Takeda equity financing and excluding, in each case, out-of-the-money securities. These estimates are subject to adjustment prior to closing of the merger, including an upward adjustment to the extent that Threshold's net cash at the effective time of the merger is less than \$12,500,000 (and as a result, Threshold security holders could own less, and Molecular security holders could own more, of the combined company), or a downward adjustment to the extent that Threshold's net cash at the effective time of the merger is more than \$17,500,000 (and as a result, Threshold security holders could own more, and Molecular security holders could own less, of the combined company).

Any changes in the market price of Threshold common stock before the completion of the merger will not affect the number of shares Molecular security holders will be entitled to receive pursuant to the merger agreement. Therefore, if before the completion of the merger the market price of Threshold common stock declines from the market price on the date of the merger agreement, then Molecular security holders could receive merger consideration with substantially lower value. Similarly, if before the completion of the merger the market price of Threshold common stock increases from the market price on the date of the merger agreement, then Molecular security holders could receive merger consideration with substantially more value for their shares of Molecular capital stock than the parties had negotiated for in the establishment of the exchange ratio. The merger agreement does not include a price-based termination right. Because the exchange ratio does not adjust as a result of changes in the value of Threshold common stock, for each one percentage point that the market value of Threshold common stock rises or declines, there is a corresponding one percentage point rise or decline, respectively, in the value of the total merger consideration issued to Molecular security holders.

*Failure to complete the Merger may result in us paying a termination fee or reimbursing expenses to Molecular Templates and could harm the price of our common stock.*

If the merger is not completed, we are subject to the following risks:

- if the Merger Agreement is terminated under certain circumstances, we will be required to pay a termination fee of \$750,000 and reimburse certain transaction fees expenses incurred by Molecular Templates;
- the price of our stock may decline and remain volatile; and
- costs related to the merger, such as financial advisor, legal and accounting fees, some which must be paid even if the Merger is not completed.

In addition, if the Merger is not consummated and Molecular Templates were to be unable to repay the \$4.0 million bridge loan we made to Molecular Templates in connection with the execution of the Merger Agreement, we would be an unsecured creditor of Molecular Templates. Moreover, our bridge loan is effectively subordinated to Molecular Templates' secured debt.

In addition, if the Merger Agreement is terminated and our board of directors determines to seek another strategic transaction, there can be no assurance that we will be able to find a partner willing to proscribe equivalent or more attractive value to us than the value proscribed by Molecular Templates in the Merger Agreement. Any termination or inability to complete the Merger could result in a significant decline in our stock price and could have a material adverse effect on our business.

*If the conditions to the Merger are not met, the Merger may not occur.*

Even if the Merger is approved by the stockholders of Molecular and the related share issuance is approved by the Threshold stockholders, specified conditions must be satisfied or waived to complete the merger. These conditions are set forth in the Merger Agreement. Threshold and Molecular cannot assure you that all of the conditions will be satisfied or waived. If the conditions are not satisfied or waived, the merger may not occur or will be delayed, and Threshold and Molecular each may lose some or all of the intended benefits of the Merger.

***The completion of the Merger is not conditioned upon Threshold holding a minimum amount of net cash at the effective time of the Merger.***

While the Merger Agreement provides that the exchange ratio may be adjusted upward or downward depending on variations in Threshold's net cash determined shortly prior to the closing of the merger, the merger agreement does not condition the completion of the merger upon Threshold's holding a minimum amount of net cash at the effective time of the merger. If Threshold has less cash at the time of the merger than the parties currently expect, the combined company will need to raise substantial additional capital sooner than expected. Failure to raise capital as and when needed, on favorable terms or at all, would have a negative impact on the financial condition of the combined company and its ability to develop product candidates. If the combined company is unable to obtain funding on a timely basis, it may be required to delay or discontinue one or more of its development programs or the commercialization of any product candidates or be unable to expand its operations or otherwise capitalize on potential business opportunities, which could materially harm its business, financial condition, and results of operations.

***The merger may be completed even though material adverse changes may result from the announcement of the merger, industry-wide changes and other causes.***

In general, either we or Molecular Templates can refuse to complete the merger if there is a material adverse change affecting the other party between March 16, 2017, the date of the Merger Agreement and the closing. However, certain types of changes do not permit either party to refuse to complete the merger, even if such change could be said to have a material adverse effect on us or Molecular Templates, including:

- any effect, change, event, circumstance or development in the conditions generally affecting the industries in which Molecular and Threshold operate or the U.S. or global economy or capital markets as a whole to the extent that such conditions do not have disproportionate impact on Molecular or Threshold, as the case may be;
- any natural disaster or any act of terrorism, sabotage, military action or war (whether or not declared) or escalation or any worsening thereof;
- any change in United States generally accepted accounting principles or any change in applicable laws, rules or regulations or the interpretation thereof;
- any effect resulting from the execution, delivery, announcement or performance of the parties' obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;
- any failure by Molecular Templates or Threshold to meet internal projections of forecasts or third-party revenue or earnings predictions for any period ending on or after the date of the Merger Agreement;
- with respect to Threshold, any change in the price or trading volume of Threshold common stock;
- any rejection by a governmental body of a registration or filing by Molecular or Threshold relating to specified intellectual property rights;
- any change in the cash position of Molecular or Threshold which results from operations in the ordinary course of business;
- the resignation or termination of a key director or officer of Molecular Templates or Threshold; or
- any sale, transfer, license, assignment or other divestiture of specified potentially transferable assets of Threshold for fair market value to a nonaffiliated third party in a bona fide arm's length transaction.

If adverse changes occur and Threshold and Molecular Templates still complete the merger, the combined organization stock price may suffer. This in turn may reduce the value of the merger to the stockholders of Threshold, Molecular Templates or both.

***While Threshold and Molecular have received commitments for the purchase of \$40.0 million in equity securities of the combined company in the concurrent financing and Threshold has entered into a stock purchase agreement with Takeda for the sale of \$20.0 million of shares of common stock of the combined company, consummation of the concurrent financing and Takeda equity financing are subject to conditions and are not conditions to closing the merger. If Molecular and Threshold complete the merger, but the concurrent financing or the Takeda equity financing are not completed, then the combined company may need to raise additional capital by issuing securities or debt or through licensing arrangements, which may be on worse commercial terms than the concurrent financing or Takeda equity financing, cause significant dilution to the combined company's stockholders, restrict the combined company's operations or require the combined company to relinquish proprietary rights***

Threshold and Molecular have received from Longitude Venture Partners III, L.P., or Longitude, an equity commitment letter, pursuant to which, immediately following the closing of the merger, Longitude will purchase \$20.0 million of equity securities in the combined company. Longitude's investment is subject to certain conditions, including the closing of the merger and the parties' having secured commitments from additional investors for the purchase of an additional \$20.0 million of such securities, which condition has been satisfied. Furthermore, Threshold and Molecular have entered into a stock purchase agreement with Takeda pursuant to which, immediately following the closing of the merger and concurrent financing, Takeda will purchase shares of common stock of the combined company for an aggregate purchase price of up to \$20.0 million such that Takeda will own no more than 19% of the outstanding shares of common stock of the combined company upon the closing of the Takeda equity financing. The closing of the merger is not contingent upon the completion of the concurrent financing or the Takeda equity financing. Holders of equity in the combined company immediately following the merger will experience significant dilution as a result of the closing of the concurrent financing and Takeda equity financing, which, assuming the conditions to the closing of the concurrent financing and Takeda equity financing are satisfied, will take place immediately following the completion of the merger. Since the concurrent financing and Takeda equity financing are subject to conditions and are not conditions to the merger, Molecular and Threshold may complete the merger but not the concurrent financing or the Takeda equity financing. If this were to occur, the combined company would have substantially less funds than Molecular and Threshold currently anticipate and may be required to raise additional funds sooner than currently planned.

Additional financing may not be available to the combined company when it needs it or may not be available on favorable terms. To the extent that the combined company raises additional capital by issuing equity securities, the terms of such an issuance may be on worse commercial terms than the concurrent financing and Takeda equity financing and may cause more significant dilution to the combined company's stockholders' ownership, and the terms of any new equity securities may have preferences over the combined company's common stock. Any debt financing the combined company enters into may involve covenants that restrict its operations. These restrictive covenants may include limitations on additional borrowing and specific restrictions on the use of the combined company's assets, as well as prohibitions on its ability to create liens, pay dividends, redeem its stock or make investments. In addition, if the combined company raises additional funds through licensing arrangements, it may be necessary to relinquish potentially valuable rights to current product candidates and potential products or proprietary technologies, or grant licenses on terms that are not favorable to the combined company.

***Some Threshold officers and directors have interests in the merger that are different from yours and that may influence them to support or approve the merger without regard to your interests.***

Certain officers and directors of Threshold participate in arrangements that provide them with interests in the merger that are different from yours, including, among others, severance benefits, the acceleration of stock option vesting, the ability to require Threshold to repurchase certain warrants, payment of deferred and current year incentive compensation, continued indemnification and the potential ability to sell an increased number of shares of common stock of the combined company in accordance with Rule 144 under the Securities Act of 1933, as amended, or the Securities Act. For example, in connection with Threshold hiring its executive officers, Threshold entered into customary severance agreements with its executive officers that provide them with cash severance payments, reimbursement for health coverage costs and the acceleration of their outstanding equity awards by 24 months in the event their employment is terminated without cause in connection with or following a change of control of Threshold. Based on the terms of these employment agreements, Threshold's executive officers are contractually entitled to these severance payments, benefits and accelerated vesting because they will be terminated in connection with the consummation of the merger.

Based on the terms of their respective severance agreements, Threshold's executive officers will be entitled to receive an aggregate total value of approximately \$2.4 million in severance benefits due to the terminations of their employment upon a change of control to occur in connection with the consummation of the Merger. These interests, among others, may influence the officers and directors of Threshold to support or approve the merger.

***The market price of Threshold common stock following the Merger may decline as a result of the Merger.***

The market price of Threshold common stock may decline as a result of the Merger for a number of reasons including if:

- investors react negatively to the prospects of the combined organization's business and prospects from the Merger;
- the effect of the Merger on the combined organization's business and prospects is not consistent with the expectations of financial or industry analysts; or
- the combined organization does not achieve the perceived benefits of the Merger as rapidly or to the extent anticipated by financial or industry analysts.

***Threshold stockholders may not realize a benefit from the Merger commensurate with the ownership dilution they will experience in connection with the merger.***

If the combined company is unable to realize the full strategic and financial benefits currently anticipated from the merger, Threshold stockholders will have experienced substantial dilution of their ownership interests without receiving any commensurate benefit, or only receiving part of the commensurate benefit to the extent the combined company is able to realize only part of the strategic and financial benefits currently anticipated from the merger. Threshold stockholders will experience further dilution upon the closing of the concurrent financing and Takeda equity financing, both of which are expected to occur immediately following the closing of the merger.

***If the merger is not completed, our stock price may decline significantly.***

The market price of our common stock is subject to significant fluctuations. During the 12-month period ended December 31, 2016, the sales price of our common stock on The NASDAQ Capital Market ranged from a high of \$1.22 in September 2016 to a low of \$0.27 in February 2016. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. In addition, the market price of our common stock will likely be volatile based on whether stockholders and investors believe that we can complete the Merger or otherwise raise additional capital to support our operations if the merger is not consummated and another strategic transaction cannot be identified, negotiated and consummated in a timely manner, if at all. The volatility of the market price of Threshold common stock is exacerbated by low trading volume. Additional factors that may cause the market price of our common stock to fluctuate include:

- the initiation of, material developments in, or conclusion of litigation to enforce or defend its intellectual property rights or defend against the intellectual property rights of others;
- the entry into any in-licensing agreements securing licenses, patents or development rights;
- the entry into, or termination of, key agreements, including commercial partner agreements;
- announcements by commercial partners or competitors of new commercial products, clinical progress or the lack thereof, significant contracts, commercial relationships or capital commitments;
- adverse publicity relating to antibody-based drug candidates, including with respect to other products and potential products in such markets;
- the introduction of technological innovations or new therapies that compete with its potential products;
- the loss of key employees;
- future sales of its common stock;
- general and industry-specific economic conditions that may affect its research and development expenditures; and
- period-to-period fluctuations in financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of Threshold common stock. In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against the company. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm Threshold's profitability and reputation.

***Molecular and Threshold security holders will have a reduced ownership and voting interest in, and will exercise less influence over the management of, the combined company following the completion of the merger as compared to their current ownership and voting interests in the respective companies.***

After the completion of the merger, the current stockholders of Molecular and Threshold will own a smaller percentage of the combined company than their ownership of their respective companies prior to the merger. Immediately after the merger but before taking into account the concurrent financing and Takeda equity financing, Molecular security holders will own approximately 65.6% of the fully-diluted common stock of Threshold, with Threshold security holders, whose shares of Threshold common stock will remain outstanding after the merger, owning approximately 34.4% of the fully-diluted common stock of the combined company, in each case without giving effect to the issuance of shares of Threshold common stock in the concurrent financing and Takeda equity financing and excluding, in each case, out-of-the-money securities. These estimates are based on the anticipated exchange ratio and are subject to adjustment.

***During the pendency of the Merger, we may not be able to enter into a business combination with another party at a favorable price because of restrictions in the Merger Agreement, which could adversely affect our businesses.***

Covenants in the Merger Agreement impede our ability to make acquisitions, subject to certain exceptions relating to fiduciaries duties, as set forth below, or complete other transactions that are not in the ordinary course of business pending completion of the Merger. As a result, if the Merger is not completed, we may be at a disadvantage to our competitors during that period. In addition, while the Merger Agreement is in effect, we are generally prohibited from, among other things, soliciting, initiating, knowingly encouraging or entering into certain extraordinary transactions, such as a merger, sale of assets or other business combination outside the ordinary course of business, with any third party. Any such transactions could be favorable to our stockholders.

***Certain provisions of the Merger Agreement may discourage third parties from submitting alternative takeover proposals, including proposals that may be superior to the arrangements contemplated by the Merger Agreement.***

The terms of the merger agreement prohibit each of Threshold and Molecular from soliciting competing proposals or cooperating with persons making unsolicited takeover proposals, except in limited circumstances when such party's board of directors determines in good faith, after consultation with its independent financial advisor, if any, and outside counsel, that an unsolicited competing proposal constitutes, or would reasonably be expected to result in, a superior competing proposal and that failure to take such action would be reasonably likely to result in a breach of the fiduciary duties of the board of directors. In addition, if Threshold or Molecular terminates the merger agreement under specified circumstances, including terminating because of a decision of a board of directors to recommend a superior competing proposal, Threshold or Molecular would be required to pay a termination fee of \$750,000 and reimburse up to \$150,000 of the other party's non-legal third-party expenses as well as all of its legal third-party expenses associated with preparing this Registration Statement on Form S-4. This termination fee may discourage third parties from submitting competing proposals to Threshold or Molecular or their stockholders, and may cause the respective boards of directors to be less inclined to recommend a competing proposal.

***Because the lack of a public market for Molecular's capital stock makes it difficult to evaluate the fair market value of Molecular's capital stock, the stockholders of Molecular may receive consideration in the merger that is less than the fair market value of Molecular's capital stock and/or Threshold may pay more than the fair market value of Molecular's capital stock.***

The outstanding capital stock of Molecular is privately held and is not traded in any public market. The lack of a public market makes it extremely difficult to determine the fair market value of Molecular's capital stock. Because the percentage of Threshold equity to be issued to Molecular stockholders was determined based on negotiations between the parties, it is possible that the value of the Threshold common stock to be received by Molecular stockholders will be less than the fair market value of Molecular's capital stock, or Threshold may pay more than the aggregate fair market value for Molecular's capital stock.

***During the pendency of the merger, Threshold and Molecular may not be able to enter into a business combination with another party on favorable terms because of restrictions in the merger agreement, which could adversely affect their respective businesses.***

Covenants in the merger agreement impede the ability of Threshold and Molecular to make acquisitions, subject to specified exceptions relating to fiduciary duties or complete other transactions that are not in the ordinary course of business pending completion of the merger. As a result, if the merger is not completed, the parties may be at a disadvantage to their competitors during that period. In addition, while the merger agreement is in effect, each party is generally prohibited from soliciting, initiating, encouraging or entering into specified extraordinary transactions, such as a merger, sale of assets or other business combination, with any third party, subject to specified exceptions. Any such transactions could be favorable to such party's stockholders.

***Certain provisions of the merger agreement may discourage third parties from submitting competing proposals, including proposals that may be superior to the arrangements contemplated by the merger agreement.***

The terms of the merger agreement prohibit each of Threshold and Molecular from soliciting competing proposals or cooperating with persons making unsolicited takeover proposals, except in limited circumstances when such party's board of directors determines in good faith, after consultation with its independent financial advisor, if any, and outside counsel, that an unsolicited competing proposal constitutes, or would reasonably be expected to result in, a superior competing proposal and that failure to take such action would be reasonably likely to result in a breach of the fiduciary duties of the board of directors. In addition, if Threshold or Molecular terminates the merger agreement under specified circumstances, including terminating because of a decision of a board of directors to recommend a superior competing proposal, Threshold or Molecular would be required to pay a termination fee of \$750,000 and reimburse up to \$150,000 of the other party's non-legal third-party expenses as well as all of its legal third-party expenses associated with preparing this Registration Statement on Form S-4. This termination fee may discourage third parties from submitting competing proposals to Threshold or Molecular or their stockholders, and may cause the respective boards of directors to be less inclined to recommend a competing proposal.

***Threshold's severance agreements with Threshold's executive officers and certain other employees require Threshold to pay severance benefits to any of those persons who are terminated under specified circumstances, including in connection with a change of control of Threshold, which could harm Threshold's financial condition or results.***

Threshold's executive officers and certain other employees are parties to severance agreements that contain change of control and severance provisions providing for severance and other benefits and acceleration of vesting of stock options in the event of a termination of employment under specified circumstances. Based on the terms of their respective severance agreements, Threshold's executive officers will be entitled to receive an aggregate total value of approximately \$1.4 million in severance benefits due to the terminations of their employment a change of control to occur in connection with the consummation of the merger. The payment of these severance benefits could harm Threshold's financial condition and results and reduce the cash available to the combined company following the merger.

### **Risks Related to Drug Discovery, Development and Commercialization**

***We remain dependent upon the success of evofosfamide. If we are unable to successfully develop and obtain regulatory approval for evofosfamide, our business and future prospects will be severely harmed.***

We have focused our development activities on evofosfamide, and substantially all of our efforts and expenditures continue to be devoted to evofosfamide. Accordingly, our future prospects are dependent on the successful development, regulatory approval and commercialization of evofosfamide. On June 2, 2016, we received preliminary comments from the FDA relating to our request for a meeting indicating that our analysis of the data from the MAESTRO study and the data from a supporting randomized Phase 2 study would not provide adequate efficacy data to support the submission of a new drug application, or NDA, for evofosfamide for the treatment of patients with locally advanced unresectable or metastatic pancreatic adenocarcinoma previously untreated with chemotherapy. Accordingly, we would be required to successfully conduct one or more additional Phase 3 clinical trials before the FDA would accept any NDA for evofosfamide. Our inability to submit an NDA to the FDA for evofosfamide in the absence of additional Phase 3 development has significantly harmed our business and future prospects. We have conducted additional analyses of the data from MAESTRO trial and have reviewed and discussed the results of our analyses with the Pharmaceuticals and Medical Devices Agency, or PMDA, in Japan, to determine potential registration pathways. However, in March 2017, Threshold received minutes from its formal meeting with the PMDA in Japan indicating that its analysis of the data from the MAESTRO trial and the data from the supporting randomized Phase II study would not provide adequate efficacy data to support the submission of a New Drug Application, or JNDA, to the PMDA for evofosfamide for the treatment of patients with locally advanced unresectable or metastatic pancreatic adenocarcinoma previously untreated with chemotherapy. While Threshold is currently in discussions with the PMDA to clarify the scope of a new clinical trial for which the PMDA would consider necessary to accept a JNDA for evofosfamide in Japan based on the previous results observed in the Japanese sub-population in the MAESTRO trial, Threshold would be required to obtain additional capital in order to conduct any such new clinical trial, and there can be no assurances that Threshold would be successful in obtaining the additional funding, whether through new collaborative, partnering or other strategic arrangements or otherwise, necessary to support any additional clinical development of evofosfamide. Our current evofosfamide development strategy is limited to the Phase 1 clinical trial of evofosfamide in combination with immune checkpoint antibodies in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center, and we do not expect to conduct any further development of evofosfamide beyond the Phase 1 clinical trial unless such development is part of a new collaborative or partnering arrangement or other strategic transaction or we are otherwise able to raise significant additional funding.



In any event, the process of obtaining regulatory approvals is expensive, often takes many years, if approval is obtained at all, and can vary substantially based upon the type, complexity and novelty of the product candidates involved. Changes in the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of evofosfamide. Any regulatory approval we may ultimately obtain, from the PMDA or otherwise, may be limited in scope or subject to restrictions or post-approval commitments that render evofosfamide or potential future product candidates not commercially viable. In particular, even if we are able to obtain and maintain regulatory approval of evofosfamide in Japan, the commercial prospects for evofosfamide could be diminished as a result of the more limited patient population in Japan. If any regulatory approval that we do obtain, including from the PMDA, is delayed or is limited, we may decide not to commercialize the applicable product candidate after receiving the approval. In addition, in March 2016, we and Merck KGaA agreed to terminate our collaboration and, as a result, we will not receive any clinical development milestones or any other funding from Merck KGaA for the purpose of conducting any further clinical development of evofosfamide. Under our former collaboration with Merck KGaA, Merck KGaA was responsible for 70% of the worldwide development expenses for evofosfamide. If we are unable to obtain sufficient additional funding for the further development of evofosfamide, whether through new collaborative, partnering or other strategic arrangements or otherwise, we may be required to cease further development of our evofosfamide program. Also, issues with the successful and timely transfer of evofosfamide development activities from Merck KGaA could significantly impact our ability to pursue registration with regulatory authorities and potential partners, and there can be no assurance that such development activities will be successfully transferred to us in a timely manner or at all. For these and other reasons, we cannot assure you that we will be able to advance the development of evofosfamide. In such event, we may be required to abandon the development of evofosfamide and forego any return on our investment from our evofosfamide program, which would severely harm our future prospects and may cause us to cease operations.

Even if we are able to meaningfully advance the development of evofosfamide, the failure of evofosfamide in the future to achieve successful clinical trial endpoints, delays in clinical trial enrollment or events or in the clinical development of evofosfamide, unanticipated adverse side effects related to evofosfamide or any other unfavorable developments or information related to evofosfamide would further significantly harm our business and our future prospects. Moreover, evofosfamide is not expected to be commercially available in the near term, if at all. Further, the commercial success of evofosfamide, if any, will depend upon its acceptance by physicians, patients, third party payors and other key decision-makers as a therapeutic and cost effective alternative to currently available products. In any event, if we are unable to successfully develop, obtain regulatory approval for and commercialize evofosfamide, our ability to generate revenue from product sales will be significantly delayed or precluded altogether and our business would be materially and adversely affected, and we may not be able to continue as a going concern.

***We currently lack the ability to discover additional prodrug product candidates and we also may not be able to successfully acquire or in-license and develop additional prodrug product candidates or programs suitable for clinical testing, either of which could limit our growth and revenue potential.***

Evofosfamide is currently our only product candidate in the clinical development stage and we may be unable to develop additional product candidates suitable for clinical testing. In this regard, as part of our workforce reduction in December 2015 that followed the reported negative results from the two Phase 3 clinical trials of evofosfamide, we eliminated our discovery research activities conducted in-house, which prevents our ability to discover additional prodrug product candidates at this time. In addition, given the uncertain prospects for evofosfamide, our strategy includes evaluating opportunities to acquire or in-license additional product candidates or development programs that build on our expertise and complement our pipeline. Any growth through acquisition or in-licensing will depend upon the availability of suitable product candidates at favorable prices and upon advantageous terms and conditions. Even if appropriate acquisition or in-licensing opportunities are available, we currently do not have, and may not in the future have, the financial resources necessary to pursue them. In addition, other companies, many of which may have substantially greater financial, marketing and sales resources, compete with us for acquisition or in-licensing opportunities. In addition, we may not be able to realize the anticipated benefits of any acquisition or in-licensing opportunity for a variety of reasons, including the possibility that a product candidate proves not to be safe or effective in later clinical trials or the integration of an acquired or licensed product candidate gives rise to unforeseen difficulties and expenditures. For example, in September 2014, we licensed rights to tarloxotinib, a clinical-stage investigational compound that we evaluated in two Phase 2 proof-of-concept clinical trials. However, based on the interim results of the two Phase 2 proof-of-concept clinical trials, we determined in September 2016 to discontinue any further development of tarloxotinib and we will therefore not realize any return on our investment in tarloxotinib. In any event, any growth through development of additional product candidates will depend principally on our ability to identify, and then to obtain the necessary funding to pursue the acquisition or in-licensing of, additional product candidates on commercially reasonable terms, as well as our ability to develop those product candidates and our ability to obtain additional funding, whether through partnering arrangements or otherwise, to complete the development of, obtain regulatory approval for and commercialize these product candidates. If we are unable to discover or obtain suitable product candidates for development, our growth and revenue potential could be significantly harmed, and we could be required to cease operations.

***If we do not establish collaborations or other strategic transactions for our current and potential future product candidates or otherwise raise substantial additional capital, we will likely need to alter, delay or abandon our development and any commercialization plans.***

Our strategy includes selectively partnering or collaborating with other pharmaceutical and biotechnology companies to assist us in furthering the development and potential commercialization of our current and potential future product candidates. In this regard, as a result of the termination of our collaboration with Merck KGaA, we are no longer eligible to receive any further milestone payments or other funding from Merck KGaA, including the 70% of worldwide development costs for evofosfamide that were previously borne by Merck KGaA. Since we are now solely responsible for the further development and commercialization of evofosfamide at our own cost, we are evaluating potential partnering opportunities for evofosfamide, and in this regard, we are currently seeking a pharmaceutical partner for evofosfamide with a commercial presence in oncology in Japan. In this regard, our ability to advance the clinical development of evofosfamide is dependent upon our ability to enter into new partnering, collaborative or other strategic arrangements for evofosfamide, or to otherwise obtain sufficient additional funding for such development. We face significant competition in seeking appropriate strategic partners, and collaborative and partnering arrangements are complex and time consuming to negotiate and document. We may not be successful in entering into new partnering, collaborative or other strategic arrangements with third parties on acceptable terms, or at all. In addition, we are unable to predict when, if ever, we will enter into any additional partnering, collaborative or other strategic arrangements because of the numerous risks and uncertainties associated with establishing such arrangements. If we are unable to negotiate new partnering, collaborative or other strategic arrangements, we may have to curtail the development of a particular product candidate, reduce, delay, or terminate its development or one or more of our other development programs, delay its potential commercialization or reduce the scope of our sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense. For example, we may have to cease further development of our evofosfamide program if we are unable to raise sufficient funding for any additional clinical development of evofosfamide through new partnering, collaborative or other strategic arrangements with third parties or other financing alternatives. In this regard, if we decide to undertake any further development of evofosfamide beyond our Phase 1 clinical trial of evofosfamide, we would need to obtain additional funding for such development, either through financing or by entering into partnering, collaborative or other strategic arrangements with third parties for any such further development and we may be unable to do. While we are currently determining third party interest in partnering or acquiring HX4, we may be unable to partner or divest these assets in a timely manner, or at all, and therefore may not receive any return on our investment in these assets. If we do not have sufficient funds, we will not be able to advance the development of our product candidates or otherwise bring our product candidates to market and generate product revenues.

***Any partnering, collaborative or other strategic arrangements that we establish in the future may not be successful or we may otherwise not realize the anticipated benefits from these arrangements. In addition, any such future arrangements may place the development and commercialization of our product candidates outside our control, may require us to relinquish important rights or may otherwise be on terms unfavorable to us***

We have in the past established and intend to continue to establish partnering, collaborative or other strategic arrangements with third parties to develop and commercialize our product candidates, and these arrangements may not be successful or we may otherwise not realize the anticipated benefits from these arrangements. For example, in March 2016, we and Merck KGaA, mutually agreed to terminate our collaboration for the development and commercialization of our evofosfamide product candidate, and, as a result, we will not receive any additional milestone payments or other funding from Merck KGaA on account of our collaboration with Merck KGaA. As of the date of this report, we have no ongoing collaborations for the development and commercialization of our product candidates. We may not be able to locate third-party strategic partners to develop and market our product candidates, and we lack the capital and resources necessary to develop our product candidates alone.

***Preclinical studies and Phase 1 or 2 clinical trials of our product candidates may not predict the results of subsequent human clinical trials.***

Preclinical studies, including studies of our product candidates in animal models of disease, may not accurately predict the results of human clinical trials of those product candidates. In particular, promising animal studies suggesting the efficacy of evofosfamide for the treatment of different types of cancer may not accurately predict the ability of evofosfamide to treat cancer effectively in humans. Evofosfamide or any other compounds we may develop 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 product candidates until we obtain FDA approval in the United States or approval by comparable regulatory agencies in Japan, Europe and other countries. A number of companies in the pharmaceutical industry, including us and those with greater resources and experience than us, have suffered significant setbacks in Phase 3 clinical trials, even after encouraging results in earlier clinical trials.

To satisfy FDA, PMDA or other 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 early clinical trials, including in Phase 1 and Phase 2 clinical trials, does not ensure that later clinical trials will be successful. Initial results from Phase 1 and Phase 2 clinical trials of evofosfamide have in the past not been, and may again in the future not be, confirmed by later analysis or in subsequent larger clinical trials. For example, the results that achieved the primary endpoint for progression-free survival in the Phase 2b trial of evofosfamide in pancreatic cancer did not predict the results of overall survival for patients in the MAESTRO trial. Likewise, the results in the Phase 1/2 trial of evofosfamide in patients with soft tissue sarcoma did not predict the results of overall survival for patients in the 406 trial. In both cases, the 406 trial and the MAESTRO trial failed to meet their primary endpoints of demonstrating a statistically significant improvement in overall survival, based on our analyses for the 406 trial and Merck KGaA's analyses for the MAESTRO trial, notwithstanding positive results in earlier clinical trials. In addition, in January 2016, we announced that an IDSMB concluded that our registrational Phase 2 clinical trial of evofosfamide plus pemetrexed versus pemetrexed alone in patients with non-squamous non-small cell lung cancer was unlikely to reach its primary endpoint of improving overall survival with statistical significance and, as a result, enrollment in this trial was closed. As these examples illustrate, despite the results reported in earlier clinical trials for evofosfamide, we do not know whether potential future clinical trials that we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market evofosfamide. Our failure to successfully complete any potential future clinical trials and obtain regulatory approval for evofosfamide would materially and adversely affect our business and severely harm our future prospects.

***Delays in our potential future 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 the progression of our potential future 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 our potential future clinical trials of evofosfamide, including our Phase 1 clinical trial of evofosfamide, 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;
- changes to clinical trial protocols.

Delays in clinical trials can also result from difficulties in enrolling patients in our potential future 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. Timely completion of clinical trials depends, in addition to the factors outlined above, on our ability to enroll a sufficient number of patients, which itself 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.

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

***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 our successfully completing clinical testing within the time frames we have planned or anticipated, 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, such as the results in the 406 trial, the MAESTRO trial 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, the PMDA or other regulatory agencies;
- enrollment in 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.

In addition, clinical results are susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. Negative or inconclusive results or adverse safety events, including patient fatalities that may be attributable to our product candidates, during a clinical trial could cause the trial to be terminated or require additional studies. Furthermore, any of our future clinical trials may be overseen by IDMCs or Data and Safety Monitoring Boards, or DSMBs. These independent oversight bodies are comprised of external experts who review the progress of the ongoing clinical trials as well as safety from other trials, and make recommendations concerning a trial's continuation, modification, or termination based on periodic review of, unblinded data. Any of our potential future clinical trials overseen by an IDMC or DSMB may be discontinued or amended in response to recommendations made by responsible IDMCs or DSMBs based on their review of trial results and an IDMC or DSMB may determine to delay or suspend the trial due to safety or futility findings based on events occurring during a clinical trial. For example, in January 2016, we announced that an IDSMB concluded that our registrational Phase 2 clinical trial of evofosfamide plus pemetrexed versus pemetrexed alone in patients with non-squamous non-small cell lung cancer was unlikely to reach its primary endpoint of improving overall survival with statistical significance and, as a result, enrollment in this trial was closed and in connection therewith, we determined to cease enrollment in all Threshold-sponsored trials of evofosfamide. The recommended termination or modification of any of our potential future clinical trials by an IDMC or DSMB, could materially and adversely impact the future development of our product candidates, and our business, prospects, operating results, and financial condition may be materially harmed.

***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, the PMDA and other regulatory agencies in the United States and Japan 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. This was the case with the FDA, which would not accept an NDA based on the data from the MAESTRO study. 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.

***Evofofamide are based on targeting the microenvironment of solid tumors and some hematological malignancies, which currently is an unproven approach to therapeutic intervention.***

Our product candidates are designed to target the microenvironment of solid tumors and some hematological malignancies by, in the case of evofosfamide, 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 these approaches. We cannot be certain that our approaches will lead to the development of approvable or marketable drugs. Our approaches may lead to unintended, or off-target, adverse effects or may lack efficacy or contribution to efficacy in combination with other anti-cancer drugs.

In addition, the FDA, the PMDA 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 current and potential future 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 are expected to have undesirable side effects. For example, in clinical trials of evofosfamide, 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 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. In this regard, our product candidates may prove to have undesirable or unintended side effects or other characteristics adversely affecting their safety, efficacy or cost effectiveness that could prevent or limit their approval for marketing and successful commercial use, or that could delay or prevent the commencement and/or completion of clinical trials for our product candidates.

***We have not yet gained sufficient experience with a commercial formulation of evofosfamide.***

The formulation of evofosfamide that was the subject of our prior clinical trials and is the subject of our Phase 1 clinical trial was changed to address issues with a prior formulation that was subject to storage and handling requirements that were not suitable for a commercial product. The current formulation of evofosfamide may be suitable for a commercial product, but additional data will be required to verify this and there can be no assurance that we will be able to do so in a timely manner, if at all. If we are not able to develop a viable commercial formulation of evofosfamide, then we may be required to conduct additional Phase 3 clinical trials of evofosfamide, or we may need to develop an alternative commercial formulation, either of which could delay, perhaps substantially, our ability to obtain any regulatory approvals of evofosfamide.

***The initial clinical formulations developed for evofosfamide or other potential future product candidates may not remain stable throughout the clinical testing phase.***

We have limited experience and data on the drug substance synthesis and the initial formulation for evofosfamide. This initial formulation and those of our potential future product candidates may not remain stable during the clinical testing phase. If these formulations were found to be unstable during clinical testing, we may be required to repeat the initial clinical trials which could increase our costs and delay the development of the applicable product candidate. We may be required to reformulate these product candidates, including evofosfamide, to improve stability. However, it is possible that we might not be able to develop a formulation of evofosfamide or other future product candidates with adequate quality that meets the need for testing in our clinical trials. We may also be required to perform additional clinical bridging studies which may further delay development. We may also be unable to scale up the manufacturing process to synthesize the current drug substance and current formulations, or the newly developed formulations, any of which could adversely affect our ability to advance the development of, and potentially obtain regulatory approval of, the applicable product candidate.

***Even if we obtain regulatory approvals for our current and potential future product candidates, our marketed drugs will be subject to ongoing regulatory review. If we fail to comply with continuing U.S. and foreign regulations, we could lose our approvals to market drugs and our business would be seriously harmed.***

Following initial regulatory approval of any drugs we may develop, we will be subject to continuing regulatory review, including review of adverse drug experiences and clinical results that are reported after our drug products become commercially available. This would include results from any post-marketing tests or vigilance required as a condition of approval. The manufacturer and manufacturing facilities used to make any of our drug candidates will also be subject to periodic review and inspection by regulatory agencies, including the PMDA should we be able to obtain regulatory approval of evofosfamide in Japan. If a previously unknown problem or problems with a product or a manufacturing and laboratory facility used by us is discovered, regulatory agencies, including potentially the PMDA, 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 regulatory approval before the product, as modified, can be marketed. Manufacturers of our products, if approved, will be subject to ongoing regulatory agency 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.

***Regulatory authorities may impose significant restrictions on the indicated uses and marketing of pharmaceutical products.***

Even if we obtain regulatory approval for evofosfamide, we would be subject to ongoing requirements by the regulatory authorities governing the manufacture, quality control, further development, labeling, packaging, storage, distribution, safety surveillance, import, export, advertising, promotion, recordkeeping and reporting of safety and other post-market information. The safety profile of any product will continue to be closely monitored by regulatory authorities after approval. If the regulatory authorities become aware of new safety information after approval of any of our product candidates, they may require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. For example, the label ultimately approved for evofosfamide, if it achieves marketing approval, may include restrictions on use. Advertising and promotion of any product candidate that obtains approval will be heavily scrutinized by government agencies and the public. Violations, including promotion of our products for unapproved or off-label uses, are subject to enforcement letters, inquiries and investigations, and civil and criminal sanctions by regulatory authorities. Engaging in impermissible promotion of any approved products for off-label uses could also subject us to false claims litigation under U.S. federal and state statutes and comparable foreign rules and regulations, which could lead to civil and criminal penalties and fines and agreements that materially restrict the manner in which we promote or distribute any approved products.

If we do not lawfully promote any approved products, we may become subject to such litigation and, if we are not successful in defending against such actions, those actions could compromise our ability to become profitable.

***We do not have a sales force or marketing infrastructure and may not develop an effective one.***

We have no sales experience, as a company. There are risks involved with establishing our own sales and marketing capabilities, as well as entering into arrangements with third parties to perform these services. Developing an internal sales force and function will require substantial expenditures and will be time-consuming, and we may not be able to effectively recruit, train or retain sales personnel. On the other hand, if we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenues will be lower than if we market and sell any products that we develop ourselves. We may not be able to effectively sell our product candidates, if approved, which could materially harm our business and our financial condition.

#### **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.***

Due to the recognition of the remaining \$65.9 million of deferred revenue from our former collaboration with Merck KGaA during the quarter ended December 31, 2015, we reported net income of \$43.8 million for the year ended December 31, 2015. However, during the six months ended June 30, 2017 we had a net loss of \$3.9 million and we have incurred losses in each of our other years since our inception in 2001, and we expect to incur losses for the foreseeable future. We have devoted and, subject to our ability to obtain additional funding and to otherwise meaningfully advance the development of our product candidates, we expect to continue to devote, substantially all of our resources to the development of evofosfamide. Accordingly, our future prospects remain dependent on the successful development, regulatory approval and commercialization of evofosfamide. In this regard, a substantial portion of our efforts have been devoted to the two pivotal Phase 3 clinical trials of evofosfamide. The failure of the 406 trial and the MAESTRO trial to meet their primary endpoints of demonstrating a statistically significant improvement in overall survival as agreed upon with the FDA, based on our analyses for the 406 trial and Merck KGaA's analyses for the MAESTRO trial, has significantly depressed our stock price and harmed our future prospects. Likewise, the announcement of our decision to discontinue the development of tarloxotinib following our analysis of the interim results of two Phase 2 proof-of-concept trials of tarloxotinib has depressed our stock price and harmed our future prospects. Although we have conducted our own analyses of the data from MAESTRO trial and have reviewed and discussed the results of our analyses with the PMDA in Japan to determine whether there is an appropriate path forward for submitting marketing authorization applications based on the data from the MAESTRO trial along with a bridging study, the PMDA and other health regulatory authorities may determine that the data from the MAESTRO trial and a bridging study are insufficient to support the approval of any marketing authorizations and that one or more additional clinical trials of evofosfamide would be required to be successfully conducted by us in order to support any such approval, including with respect to the Japanese sub-population we are targeting. If we are required to successfully conduct and complete any additional clinical trials of evofosfamide in order to support potential approval of evofosfamide in Japan, we would be required to obtain additional capital and there can be no assurances that we would be successful in obtaining the additional funding, whether through new collaborative, partnering or other strategic arrangements or otherwise, necessary to support any additional clinical development of evofosfamide. Moreover, apart from the Phase 1 clinical trial of evofosfamide, we cannot currently predict whether and to what extent we may continue or increase evofosfamide development activities in future periods, if at all, and what our future cash needs may be for any such activities. For these and other reasons, we cannot assure you that we will be able to advance the development of evofosfamide. In such event, we may be required to abandon the development of evofosfamide and forego any return on our investment from our evofosfamide program, which would severely harm our future prospects and may cause us to cease operations. In any event, we do not expect to generate any revenue from the commercial sales of evofosfamide or any potential future product candidates, including evofosfamide, 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, or rely on other parties to do so. 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.

***We need substantial additional funding and may be unable to raise capital, 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 future collaborative, licensing, acquisition or other strategic arrangements that we may establish for our product candidates;
- the amount and timing of any licensing fees, milestone payments and royalty payments from potential future partners or collaborators, if any;
- the amount and timing of contingent licensing fees, milestone payments and royalty payments that we are obligated to pay to third parties;
- the scope, rate of progress and cost of our potential clinical trials, including our Phase 1 clinical trial of evofosfamide, and other development activities;
- the costs and timing of obtaining regulatory approvals;
- the cost of manufacturing clinical, and establishing commercial, supplies of our product candidates and any products that we may develop;
- the cost and timing of establishing sales, marketing and distribution capabilities;
- 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 our projected operating requirements for the next twelve months based upon current operating plans and spending assumptions. However, we will need to raise substantial additional capital to meaningfully advance the clinical development of evofosfamide, whether through new collaborative, partnering or other strategic arrangements or otherwise, and to in-license or otherwise acquire and develop additional product candidates or programs. In particular, our ability to meaningfully advance the clinical development of evofosfamide is dependent upon our ability to enter into new partnering, collaborative or other strategic arrangements for evofosfamide, or to otherwise obtain sufficient additional funding for such development, particularly since we are no longer eligible to receive any further milestone payments or other funding from Merck KGaA for evofosfamide, including the 70% of worldwide development costs for evofosfamide that were previously borne by Merck KGaA.

While we have been able to fund our operations to date, we currently have no ongoing collaborations for the development and commercialization of evofosfamide, and no source of revenue, nor do we expect to generate revenue for the foreseeable future. We also do not have any commitments for future external funding. Until we can generate a sufficient amount of product revenue, which we may never do, we expect to finance future cash needs 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 and the terms upon which we are able to raise such funds have been severely harmed by the negative results reported from our two pivotal Phase 3 clinical trials of evofosfamide and our decision to discontinue development of tarloxotinib, and may in the future be adversely impacted by the uncertainty regarding the prospects for future development of evofosfamide and our ability to advance the development of evofosfamide or otherwise realize any return on our investments in evofosfamide, if at all. Our ability to raise additional funds and the terms upon which we are able to raise such funds may also be adversely affected by the uncertainties regarding our financial condition, the sufficiency of our capital resources, our ability to maintain the listing of our common stock on The NASDAQ Capital Market and recent and potential future management turnover. As a result of these and other factors, we cannot be certain that sufficient funds will be available to us on satisfactory terms, if at all. To



the extent we raise additional funds by issuing equity securities, our stockholders may experience significant dilution, particularly given our currently depressed stock price, and debt financing, if available, may involve restrictive covenants. 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 our product candidates, technologies or potential markets, any of which could result in our stockholders having little or no continuing interest in our evofosfamide program as stockholders or otherwise, or which could delay or require that we curtail or eliminate some or all of our development activities or otherwise have a material adverse effect on our business, financial condition and results of operations.

If we are unable to secure additional funding on a timely basis or on terms favorable to us, we may be required to cease or reduce any product development activities, to conduct additional workforce reductions, 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 financial results are likely to fluctuate from period to period, making it difficult to evaluate our stock based on financial performance.***

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 only one product candidate in clinical development.

***Our success depends in part on attracting, 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 we will 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. The loss of the services of one or more of our other key employees could delay or adversely impact the development of our product candidates.

In December 2015, we announced a workforce reduction constituting approximately two-thirds of our workforce with an additional workforce reduction in September 2016, and as of December 31, 2016, we had only 15 employees. Our success will depend on our ability to retain and motivate remaining personnel and hire additional qualified personnel when required, and our history of implementing workforce reductions, along with the potential for future workforce reductions, may negatively affect our ability to retain and/or attract talented employees. In addition, 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.

In addition, certain members of our management teams were part of our December 2015 and September 2016 workforce reductions, including our former senior vice presidents of regulatory affairs and pharmaceutical development and manufacturing as well as our former Chief Scientific Officer and our former Chief Operating Officer. Management transition inherently causes some loss of institutional knowledge, which can negatively affect strategy and execution and disrupt our ability to successfully manage and grow our business, and our results of operations and financial condition could suffer as a result.

***Significant disruptions of information technology systems or breaches of data security could adversely affect our business.***

Our business is increasingly dependent on critical, complex and interdependent information technology systems, including Internet-based systems, to support business processes as well as internal and external communications. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and computer viruses that may result in the impairment of production and key business processes.

In addition, our systems are potentially vulnerable to data security breaches — whether by employees or others — that may expose sensitive data to unauthorized persons. Such data security breaches could lead to the loss of trade secrets or other intellectual property, or could lead to the public exposure of personal information (including sensitive personal information) of our employees, clinical trial patients, customers and others. Such disruptions and breaches of security could have a material adverse effect on our business, financial condition and results of operations.

***Our ability to use our net operating loss carryforwards and certain other tax attributes will be limited.***

Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes (such as research tax credits) to offset its post- change taxable income or taxes may be limited. Our prior and potential future equity offerings and other changes in our stock ownership, some of which are outside of our control, may have resulted or could in the future result in an ownership change. If a limitation were to apply, utilization of a portion of our domestic net operating loss and tax credit carryforwards could be limited in future periods and a portion of the carryforwards could expire before being available to reduce future income tax liabilities.

***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 facilities in Menlo Park, 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 evofosfamide and expect to rely on third parties to manufacture any other potential future product candidates that we may develop. 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 evofosfamide and any other product candidates we may develop could be delayed.***

We do not have our own manufacturing capability for the evofosfamide active pharmaceutical ingredient, or API, or evofosfamide drug product. To date, we have relied on, and we expect to continue to rely on, a limited number of third party contract manufacturers and excipient suppliers for the evofosfamide API and evofosfamide drug product to meet our clinical supply needs of evofosfamide. We have no long-term commitments or commercial supply agreements with any of our evofosfamide suppliers. 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 evofosfamide API and drug product manufactured to meet the clinical supply demands for our clinical trials. If we are not successful in having sufficient quantities of evofosfamide API and drug product manufactured, or if manufacturing is interrupted at our contract manufacturers and excipient suppliers for evofosfamide API and our evofosfamide drug product manufacturers due to regulatory or other reasons, or consume more drug product than anticipated because of a higher than expected trial utilization or have quality issues that limit the utilization of the drug product, we may experience a significant delay in our evofosfamide clinical program. In any event, we will need to order additional evofosfamide API and drug product and we have in the past experienced delays in the receipt of satisfactory drug product, and any additional delays we may experience in the receipt of satisfactory evofosfamide API or drug product could cause significant delays in our potential future evofosfamide clinical trials, which would harm our business. Moreover the need for additional supplies and preparation for registration may require manufacturing process improvements in evofosfamide API and drug product. The manufacturing processes improvements for the evofosfamide API may require facilities upgrades at our suppliers, which may lead to delays or disruption in supply, or delays in regulatory approval of evofosfamide. Changes to the formulation of evofosfamide for our potential future 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. Even if we are successful in raising the additional capital necessary to meaningfully advance the development of evofosfamide, if we are not successful in procuring sufficient evofosfamide clinical trial material, we may experience a significant delay in our evofosfamide clinical program. Finally, we have not engaged any backup or alternative suppliers for parts of our evofosfamide supply chain for our potential future evofosfamide clinical trials. If we are required to engage a backup or alternative supplier, the transfer of technical expertise and manufacturing process to the backup or alternative supplier would be difficult, costly and time-consuming and would increase the likelihood of a significant delay or interruption in manufacturing or a shortage of supply of evofosfamide.

In any event, additional agreements for more supplies of each of our product candidates, including evofosfamide, will be needed to complete clinical development and/or commercialize them. In this regard, we may need to enter into agreements for additional supplies of evofosfamide to commercialize it or develop such capability itself. We cannot be certain that we can do so on favorable terms, if at all. We will need to satisfy all current good manufacturing practice, or cGMP, regulations, including passing specifications. Our inability to satisfy these requirements could delay our clinical programs and the potential commercialization of evofosfamide if approved for commercial sale.

If evofosfamide or any of our other product candidates is approved by the FDA, the PMDA or other regulatory agencies for commercial sale, we will need to have it manufactured in commercial quantities. It may not be possible to successfully manufacture commercial quantities of evofosfamide or increase the manufacturing capacity for evofosfamide or any of our other product candidates in a timely or economically feasible manner. Prior to commercial launch of evofosfamide, we may be required to manufacture additional validation batches, which the FDA, the PMDA and other regulatory agencies must review and approve. If we are unable to successfully manufacture the additional validation batches or increase the manufacturing capacity for evofosfamide or any other product candidates, 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, adversely impacted by an action of a regulatory agency or if the facility is located in another country and trade or commerce with or exportation from such country is interrupted or delayed, 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.

In addition, the evofosfamide formulation includes excipients that might be available from a limited number of suppliers. We have not signed long term supply agreements with these excipient suppliers. We will need to enter into long term supply agreements to ensure uninterrupted supply of these excipients to continuously manufacture clinical batches or commercial supplies, which we may be unable to do in a timely or economically feasible manner or at all.

We also expect to rely on contract manufacturers or other third parties to produce sufficient quantities of clinical trial product for any other product candidates that we may develop. It is possible that we might not be able to develop a formulation for evofosfamide with adequate quality that meets the need for testing in our clinical trials. In any event, in order for us to commence any potential future clinical trials of our current and potential future product candidates, including our Phase 1 clinical trial of evofosfamide, we need to obtain or have manufactured sufficient quantities of clinical trial product and there can be no assurance that we will be able to obtain sufficient quantities of clinical trial product in a timely manner or at all. Any delay in receiving sufficient supplies of clinical trial product for our potential future studies could negatively impact our development programs.

***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 single source contract manufacturers must undergo an inspection by the FDA, the PMDA and other foreign agencies for compliance with cGMP regulations, before the respective product candidates can be approved in their region. 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 agencies, the PMDA and other 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, warning letters, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecution.

***We expect to rely on third parties to conduct some of our potential future 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 and applicable foreign regulatory 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 future clinical trials, if any, and in our plans to submit NDAs to the FDA and PMDA, 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 Pharmaceuticals, Inc. to develop and commercialize glufosfamide***

We are dependent upon Eleison Pharmaceuticals, Inc., or Eleison 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 continue clinical development activities with glufosfamide. Even if Eleison is successful at raising sufficient funding, it may not be successful in developing and commercializing glufosfamide. 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. In such event, since we have no further development plans for glufosfamide, we may not receive any further return on our investment in glufosfamide.

**Risks Related to Our Intellectual Property**

***Hypoxia-targeted 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 U.S. and foreign issued patents that cover certain hypoxia-targeted prodrugs, including evofosfamide, respectively, we have no issued patents or pending patent applications that would prevent others from taking advantage of hypoxia-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 mechanism of action of our hypoxia-prodrug product candidate.

***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. If we are not able to obtain adequate protection for, or defend, the intellectual property position of evofosfamide or any other potential future product candidates, then we may not be able to retain or attract collaborators to partner our development programs, including evofosfamide. Further, even if we can obtain protection for and defend the intellectual property position of evofosfamide or any potential future product candidates, we or any of our potential future strategic partners still may not be able to exclude competitors from developing or marketing competing drugs. Should this occur, we, and potential future strategic partners may not generate any revenues or profits from evofosfamide or any potential future product candidates, or our revenue or profit potential would be significantly diminished.

***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 and from generic pharmaceutical manufacturers. In particular, if approved for commercial sale for pancreatic cancer, evofosfamide would compete with Gemzar®, marketed by Eli Lilly and Company; Tarceva®, marketed by Roche/Genentech and Astellas Oncology; Abraxane® marketed by Celgene; and FOLFIRINOX, which is a combination of generic products that are sold individually by many manufacturers. There may also be product candidates of which we are not aware at an earlier stage of development that may compete with evofosfamide or other potential future product candidates, we may develop. In short, each cancer indication for which we are or may be developing product candidates has a number of established medical therapies with which our candidates will compete. Our evofosfamide product candidate for targeting the tumor hypoxia is likely to be in highly competitive markets and may eventually compete with other therapies offered by companies who are developing or were developing drugs that target tumor hypoxia.

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.

***Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.***

Healthcare providers, physicians and third-party payors will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we would market, sell and distribute our products. As a biotechnology company, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. The laws that may affect our ability to operate include:

- Federal healthcare Anti-Kickback Statute will constrain our marketing practices, educational programs, pricing policies, and relationships with healthcare providers or other entities, by prohibiting, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation;
- Federal civil and criminal false claims laws and civil monetary penalty laws impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, including the Medicare and Medicaid programs, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- The Federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also created federal criminal laws that prohibit knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statements in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the Federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of these statutes or specific intent to violate them to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- The federal physician sunshine requirements under the Affordable Care Act requires manufacturers of drugs, devices, biologics and medical supplies to report annually to HHS information related to payments and other transfers of value to physicians, other healthcare providers, and teaching hospitals, and ownership and investment interests held by physicians and other healthcare providers and their immediate family members and applicable group purchasing organizations; and
- Analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and state and foreign laws that govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any physicians or other healthcare providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

***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 or foreign regulatory investigation of the safety or efficacy of our products, our manufacturing processes and facilities or our marketing programs. An FDA or foreign regulatory 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, patients, healthcare payors and the medical community, we may not generate product revenues sufficient to attain profitability.

***If third-party payors do not cover or 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 approved products successfully will depend in part on the extent to which coverage and 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. Coverage and 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 coverage and 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 coverage and 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.

In March 2010, the United States Congress enacted the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the Affordable Care Act, which, among other things, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs and included the following changes to the coverage and payment for drug products under government health care programs:

- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- extended Medicaid drug rebates, previously due only on fee-for-service utilization, to Medicaid managed care utilization, and created an alternate rebate formula for new formulations of certain existing products that is intended to increase the amount of rebates due on those drugs;
- expanded the types of entities eligible for the 340B drug discount program that mandates discounts to certain hospitals, community centers and other qualifying providers; and
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-of-sale- discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

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 or otherwise result in pricing pressures with respect to our future products. In this regard, we expect further federal and state proposals and healthcare reforms to continue to be proposed to limit the price of, or to curb pricing increases for, prescription drugs, including as a result of negative publicity regarding drug pricing strategies by pharmaceutical companies and pricing increases on pharmaceutical products generally, which could limit the prices that can be charged for our future products, which in turn may limit our commercial opportunity and/or negatively impact revenues from sales of 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 potential future profitability.***

In some foreign countries, particularly in the European Union and Japan, 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 potential future 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 agencies, 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.

- reduced liquidity for our stockholders;
- potential loss of confidence by employees and potential future partners or collaborators; and
- loss of institutional investor interest and fewer business development opportunities.

**Risks Related to Ownership of our Common Stock**

***We may not be able to correctly estimate our future operating expenses or our operating expenses may exceed our expectations, which could cause the ownership percentage retained by the Threshold stockholders in the combined organization to be reduced.***

Pursuant to the terms of the Merger Agreement, if Threshold's net cash at the consummation of the merger is less than \$12.5 million, the ownership percentage of Threshold's stockholders, option holders and warrant holders in the combined organization immediately following the consummation of the merger will be reduced. As of June 30, 2017, we had cash and cash equivalents totaling \$16.8 million. The cash, cash equivalents and marketable securities as of June 30, 2017 excludes a \$4.0 million bridge loan to Molecular Templates, Inc. in the form of a promissory note. However, certain contingent payments related to the Merger, including severance and change of control payments payable to our existing and former executive officers, will become due and payable in connection with the closing of the Merger.

Our operating expenses and expenses associated with the Merger and our obligations thereunder may exceed our estimates as a result of a variety of factors, many of which are outside of its control. These factors include:

- the time, resources and costs associated with the merger, including legal and accounting costs;
- the costs associated with complying with its obligations under the Merger Agreement; and
- the costs of any claims or liabilities related to the proposed merger.

If we have not correctly estimated our future operating expenses or our operating expenses exceed our expectations, we may be below the \$12.5 million level at the time of the merger's closing, which would result in an adjustment to the exchange ratio in the Merger Agreement such that the ownership percentage retained by the our stockholders in the combined organization immediately following the merger may be reduced.

***If we fail to continue to meet all applicable NASDAQ Global Market requirements and NASDAQ determines to delist our common stock, the delisting could adversely affect the market liquidity of our common stock and the market price of our common stock could decrease.***

Our common stock is listed on The NASDAQ Global Market. In order to maintain our listing, we must meet minimum financial and other requirements, including requirements for a minimum amount of capital, a minimum price per share and continued business operations so that we are not characterized as a "public shell company." On November 11, 2016, we received a notice from the staff (the "Staff") of The NASDAQ Stock Market LLC ("Nasdaq") that, for the previous 30 consecutive business days, the closing bid price for our common stock was below the \$1.00 per share minimum bid price requirement for continued listing on The NASDAQ Capital Market under Nasdaq Listing Rule 5550(a)(2) (the "Bid Price Rule"). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we will have 180 calendar days, or until May 10, 2017, to regain compliance with the Bid Price Rule. To regain compliance with the Bid Price Rule, the closing bid price of our common stock must be at least \$1.00 per share for a minimum of 10 consecutive business days at any time during this 180-day period. In March 2017, the Company's board of directors approved a reverse stock split, within a range which shall be no less than 5:1 or more than 15:1 of the Company's common and preferred stock, which would be contingent upon shareholder approval of the Merger and the stock split. We did not regain compliance with the rule by May 10, 2017, but became eligible for an additional 180 calendar day compliance period by meeting the continued listing requirement for market value of publicly held shares and all other applicable standards for initial listing on The NASDAQ Capital Market, with the exception of the bid price requirement, and by providing written notice of its intention to cure the deficiency during the second compliance period by effecting a reverse stock split, if necessary. If we regain compliance with the Bid Price Rule, Nasdaq will provide us with written confirmation and will close the matter. However, if it appears to the Staff that we will not be able to cure the deficiency, Nasdaq will notify us that its common stock will be subject to delisting. In the event of such a notification, we may appeal the Staff's determination to delist its securities, but there can be no assurance the Staff would grant our request for continued listing. If we fail to continue to meet all applicable NASDAQ Global Market requirements, Nasdaq may determine to delist our common stock from The NASDAQ Global Market. If our common stock is delisted for any reason, it could reduce the value of our common stock and its liquidity.

If our common stock is delisted as a result of our failure to comply with the Bid Price Requirement or any other Nasdaq continued listing requirement, we would expect our common stock to be traded in the over-the-counter market, which could adversely affect the liquidity of our common stock. Additionally, delisting would substantially impair our ability to raise additional funds to fund our operations, to meaningfully advance the development of evofosfamide and/or to acquire or in-license additional product candidates or development programs, and we could face other significant material adverse consequences, including:

- a limited availability of market quotations for our common stock;
- a reduced amount of news and analyst coverage for us;
- reduced liquidity for our stockholders;
- potential loss of confidence by employees and potential future partners or collaborators; and
- loss of institutional investor interest and fewer business development opportunities.

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

- announcements regarding the development of our product candidates, including any delays in any potential future clinical trials, and investor perceptions of our ability to advance the development of evofosfamide;
- adverse results or delays in potential future clinical trials of evofosfamide;
- our ability to raise additional capital to advance the development of evofosfamide and the terms of any related financing arrangements;
- announcements of regulatory approval or non-approval of our product candidates, or delays in the applicable regulatory agency review process;
- adverse actions taken by regulatory agencies with respect to our product candidates, clinical trials, manufacturing processes or sales and marketing activities;
- our ability to enter into new collaborative, licensing or other strategic arrangements with respect to our product candidates;
- the terms and timing of any future collaborative, licensing or other strategic arrangements that we may establish;
- announcements of technological innovations, patents or new products by us or our competitors;
- regulatory developments in the United States, Japan and other foreign countries;
- any lawsuit involving us or our product candidates;
- our ability to comply with the minimum listing requirements of The NASDAQ Stock Market LLC;
- 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 us, including under our sales agreement with Cowen and Company, LLC, or Cowen;
- sales of our common stock by our executive officers, directors and significant stockholders or sales of substantial amounts of common stock; and
- additional losses 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 there are large sales of our common stock, the market price of our common stock could drop substantially. In addition, a significant number of shares of our common stock are subject to issuance upon exercise of outstanding options and warrants, which upon such exercise would result in dilution to our security holders.***

If we or our existing stockholders sell a large number of shares of our common stock or the public market perceives that we or our existing stockholders might sell shares of our common stock, the market price of our common stock could decline significantly. As of June 30, 2017, we had 71,591,918 outstanding shares of common stock, substantially all of which may be sold in the public market without restriction, subject to any affiliate restrictions. On November 2, 2015, we entered into a sales agreement with Cowen, under which we may sell shares of our common stock from time to time through Cowen, as our agent for the offer and sale of the shares, in an aggregate amount not to exceed \$50 million. Though our ability to sell shares of common stock through Cowen under our sales agreement with Cowen is practically limited or precluded altogether due to our currently-depressed stock price, to the extent that we sell shares of our common stock pursuant to the sales agreement with Cowen in the future, our stockholders will experience dilution. In addition, a significant number of shares of our common stock are subject to issuance upon the exercise of outstanding options and warrants. On February 18, 2015, we issued warrants to purchase an aggregate of 8,300,000 shares of our common stock, at an initial exercise price per share of \$10.86, which exercise price was adjusted to \$3.62 on January 21, 2016. In addition, as of June

30, 2017, there were 10,732,260 shares of our common stock issuable upon the exercise of outstanding options having a weighted-average exercise price of \$3.03 per share. Although we cannot determine at this time how many of the currently outstanding options and warrants will ultimately be exercised, the options and warrants will likely be exercised only if the exercise price is below the market price of our common stock. To the extent that the options and 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.

***Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 could have a material adverse effect on our stock price.***

Section 404 of the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the Securities and Exchange Commission, or SEC, require annual management assessments of the effectiveness of our internal control over financial reporting. If we fail to maintain the adequacy of our internal control over financial reporting, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC. If we cannot favorably assess, or our independent registered public accounting firm is unable to provide an unqualified attestation report on, the effectiveness of our internal control over financial reporting, investor confidence in the reliability of our financial reports may be adversely affected, which could have a material adverse effect on our stock price.

***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.

***Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.***

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person’s conduct was unlawful.
- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.
- We may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

***Our ability to use our net operating losses to offset future taxable income, if any, may be subject to certain limitations.***

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an “ownership change” (generally defined as a greater than 50-percentage-point cumulative change (by value) in the equity ownership of certain stockholders over a rolling three-year period) is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income. If we undergo additional ownership changes (some of which changes may be outside our control), our ability to utilize our NOLs could be further limited by Section 382 of the Code. Our NOLs may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs. Furthermore, our ability to utilize our NOLs is conditioned upon our attaining profitability and generating U.S. federal taxable income. We have incurred net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; thus, we do not know whether or when we will generate the U.S. federal taxable income necessary to utilize our NOLs. See the risk factors described above under “Risks Related to Related to Our Financial Performance and Operations.”

***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.

***Our employment agreements with our executive officers and certain other employees may require us to pay severance benefits to any of those persons who are terminated under specified circumstances, including in connection with a change of control of us, which could harm our financial condition or results.***

Our executive officers and certain other employees are parties to employment agreements that contain change of control and severance provisions providing for severance and other benefits and acceleration of vesting of stock options in the event of a termination of employment under specified circumstances. The payment of these severance benefits could harm our financial condition and results. In addition, these potential severance payments may discourage or prevent third parties from seeking a business combination with us.

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

None.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

**ITEM 5. OTHER INFORMATION**

None.

## ITEM 6. 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.

<b>Exhibit Number</b>	<b>Description</b>
10.1	Form of Change of Control Severance Agreement between Threshold Pharmaceuticals, Inc., and certain executive and employees, to be dated effective as of March 16, 2017 (incorporated by reference to Exhibit 10.47 to the Registrant's Registration Statement on Form S-4, as amended (File No. 333-217993), filed on June 27, 2017).
10.2	Stock Purchase Agreement, dated as of June 23, 2017, by and among Molecular Templates, Inc., Threshold Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Ltd. (incorporated by reference to Exhibit 10.48 to the Registrant's Registration Statement on Form S-4, as amended (File No. 333-217993), filed on June 27, 2017).
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 as amended.
	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.
32.1*	
32.2*	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350.
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.

\* Furnished herewith. This certification is not deemed filed for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and is not deemed to be incorporated by reference into any filing under the Securities the Exchange Act.

**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: July 31, 2017

/s/ Wilfred E Jaeger, Ph.D.

Wilfred E. Jaeger, Ph.D.  
Chief Executive Officer  
(Principal Executive Officer)

Date: July 31, 2017

/s/ Joel A. Fernandes

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



## EXHIBIT INDEX

<b>Exhibit Number</b>	<b>Description</b>
10.1	Form of Change of Control Severance Agreement between Threshold Pharmaceuticals, Inc., and certain executive and employees, to be dated effective as of March 16, 2017 (incorporated by reference to Exhibit 10.47 to the Registrant's Registration Statement on Form S-4, as amended (File No. 333-217993), filed on June 27, 2017).
10.2	Stock Purchase Agreement, dated as of June 23, 2017, by and among Molecular Templates, Inc., Threshold Pharmaceuticals, Inc., a wholly owned subsidiary of Takeda Pharmaceutical Company Ltd. (incorporated by reference to Exhibit 10.48 to the Registrant's Registration Statement on Form S-4, as amended (File No. 333-217993), filed on June 27, 2017).
31.1	<a href="#"><u>Certification of Principal Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 as amended.</u></a>
31.2	<a href="#"><u>Certification of Principal Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 as amended.</u></a>
32.1*	<a href="#"><u>Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.</u></a>
32.2*	<a href="#"><u>Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350.</u></a>
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.

\* Furnished herewith. This certification is not deemed filed for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, and is not deemed to be incorporated by reference into any filing under the Securities Act or the Exchange Act.

CERTIFICATION

I, Wilfred E. Jaeger, certify that:

1. I have reviewed this Quarterly Report on 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 (s) 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: July 31, 2017

/s/ Wilfred E. Jaeger, M.D.

Wilfred E. Jaeger, M.D.

Chief Executive Officer

(Principal Executive Officer)

**CERTIFICATION**

I, Joel A. Fernandes, certify that:

1. I have reviewed this Quarterly Report on 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 (s) 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: July 31, 2017

/s/ Joel A. Fernandes

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

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 June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Wilfred E. Jaeger, 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: July 31, 2017

/s/ Wilfred E. Jaeger, M.D.

Wilfred E. Jaeger, M.D.  
Chief Executive Officer  
(Principal Executive Officer)

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 June 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joel A. Fernandes, Senior Vice President, 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: July 31, 2017

/s/ Joel A. Fernandes

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