

THRESHOLD PHARMACEUTICALS INC

FORM 10-Q (Quarterly Report)

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Address	170 HARBOR WAY SUITE 300 SOUTH SAN FRANCISCO, CA 94080
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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D. C. 20549**

FORM 10-Q

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

For the quarterly period ended March 31, 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 Ave., 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 April 28, 2017, there were 71,591,518 shares of common stock, par value \$0.001 per share, of Threshold Pharmaceuticals, Inc. outstanding.

Threshold Pharmaceuticals, Inc.

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

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

	March 31, 2017	December 31, 2016 (Note 1)
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 11,438	\$ 10,551
Marketable securities, current	6,163	13,000
Notes receivable	2,000	—
Prepaid expenses and other current assets	352	623
Total current assets	19,953	24,174
Property and equipment, net	—	109
Total assets	<u>\$ 19,953</u>	<u>\$ 24,283</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 328	\$ 822
Collaboration payable	—	129
Accrued clinical and development expenses	178	777
Accrued liabilities	1,704	888
Total current liabilities	2,210	2,616
Warrant liability	2,407	1,743
Deferred rent	9	36
Total liabilities	4,626	4,395
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: 71,591,518 shares at March 31, 2017 and 71,560,294 shares at December 31, 2016	72	72
Additional paid-in capital	373,864	373,352
Accumulated other comprehensive loss	(1)	(2)
Accumulated deficit	(358,608)	(353,534)
Total stockholders' equity	15,327	19,888
Total liabilities and stockholders' equity	<u>\$ 19,953</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 March 31,	
	2017	2016
Revenue	\$ —	\$ —
Operating expenses:		
Research and development	1,590	6,005
General and administrative	2,853	2,249
Total operating expenses	4,443	8,254
Loss from operations	(4,443)	(8,254)
Interest income (expense), net	33	32
Other income (expense), net	(664)	370
Net loss	(5,074)	(7,852)
Other comprehensive income (loss):		
Unrealized gain (loss) on available-for-sale securities	1	22
Comprehensive loss	\$ (5,073)	\$ (7,830)
Net loss per share:		
Basic	\$ (0.07)	\$ (0.11)
Diluted	\$ (0.07)	\$ (0.11)
Weighted average number of shares used in net loss per share calculations:		
Basic	71,575	71,488
Diluted	71,575	71,488

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

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

	Three Months Ended March 31,	
	2017	2016
Cash flows from operating activities:		
Net loss	\$ (5,074)	\$ (7,852)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	26	185
(Gain) loss on sale of property and equipment	(21)	9
Stock-based compensation expense	505	843
Change in common stock warrant fair value	664	(370)
Changes in operating assets and liabilities:		
Collaboration receivable/payable	(129)	1,114
Prepaid expenses and other assets	271	719
Accounts payable	(494)	838
Accrued clinical and development expenses	(599)	(3,509)
Accrued liabilities	816	(2,582)
Deferred rent	(27)	(22)
Net cash used in operating activities	<u>(4,062)</u>	<u>(10,627)</u>
Cash flows from investing activities:		
Issuance of promissory notes to Molecular Templates, Inc.	(2,000)	—
Purchases of marketable securities	(299)	(7,495)
Proceeds from sale of property and equipment	100	—
Proceeds from maturities of marketable securities	7,141	19,731
Net cash provided by investing activities	<u>4,942</u>	<u>12,236</u>
Cash flows from financing activities:		
Proceeds from issuance of common stock	7	13
Net cash provided by financing activities	<u>7</u>	<u>13</u>
Net increase in cash and cash equivalents	<u>887</u>	<u>1,622</u>
Cash and cash equivalents, beginning of period	10,551	9,589
Cash and cash equivalents, end of period	<u>\$ 11,438</u>	<u>\$ 11,211</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.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for 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. The condensed consolidated balance sheet at December 31, 2016 has been derived from the audited financial statements at that date but does not include all the information and footnotes required by accounting principles generally accepted in the United States of America. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto for the year ended December 31, 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 for quarter ending March 31, 2017.

NOTE 2 — NET LOSS PER SHARE

Basic net loss per common share is computed by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted net 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 March 31,	
	2017	2016
Numerator:		
Net loss	\$ (5,074)	\$ (7,852)
Denominator:		
Weighted average common shares outstanding	71,575	71,488
Net loss per share		
Basic	\$ (0.07)	\$ (0.11)
Diluted	\$ (0.07)	\$ (0.11)

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 March 31,	
	2017	2016
Shares issuable upon exercise of warrants	8,300	8,300
Shares issuable upon exercise of stock options	10,827	11,561
Shares issuable related to the 2004 Purchase Plan	20	39

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. 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”). 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 securities to be sold in the Financing have not been registered under the Securities Act, or any state securities laws, and may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. The closing of the Merger is not contingent upon the completion of this Financing.

NOTE 4 — STOCKHOLDERS’ EQUITY

Common Stock Warrant Valuation

The Company accounts for its common stock warrants under guidance now codified in ASC 815 that clarifies the determination of whether an instrument (or an embedded feature) is indexed to an entity’s own stock, which would qualify for classification as a liability or equity. ASC 815 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 March 31, 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 February 2015 offering. The fair value of these warrants on March 31, 2017 and December 31, 2016 was determined using a Black-Scholes model with the following key level 3 inputs:

	March 31, 2017	December 31, 2016
Risk-free interest rate	1.50%	1.93%
Expected life (in years)	2.89	3.13
Dividend yield	—	—
Volatility	141%	135%
Stock price	\$ 0.57	\$ 0.44

During three months ended March 31, 2017, the change in fair value of \$0.7 million of noncash expense 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 March 31, 2017 and December 31, 2016:

(in thousands)	Fair Value as of March 31, 2017	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
February 2015 warrants	\$ 2,407	\$ —	\$ —	\$ 2,407

(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 three months ended March 31, 2017	664
Balance at March 31, 2017	<u>\$ 2,407</u>

NOTE 5 — 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 months ended March 31, 2017 and 2016 as follows (in thousands):

	Three Months Ended March 31,	
	2017	2016
Amortization of stock-based compensation:		
Research and development	\$ 151	\$ 318
General and administrative	354	525
	<u>\$ 505</u>	<u>\$ 843</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 months ended March 31, 2017 and 2016:

	Three Months Ended March 31,	
	2017	2016
Employee Stock Options:		
Risk-free interest rate	—	1.64%
Expected term (in years)	—	6.02
Dividend yield	—	—
Volatility	—	108%
Weighted-average fair value of stock options granted	\$ —	\$ 0.45
	Three Months Ended March 31,	
	2017	2016
Employee Stock Purchase Plan (ESPP):		
Risk-free interest rate	0.56%	0.56%
Expected term (in years)	1.24	1.24
Dividend yield	—	—
Volatility	161%	161%
Weighted-average fair value of ESPP purchase rights	\$ 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 \$0.5 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 months ended March 31, 2017 and \$0.8 million of stock-based compensation for the three months ended March 31, 2016. As of March 31, 2017, the total unrecognized compensation cost related to unvested stock-based awards granted to employees under the Company's equity incentive plans was approximately \$2.9 million before forfeitures. This cost will be recorded as compensation expense on a straight-line basis over the remaining weighted average requisite service period of approximately 2.3 years.

Equity Incentive Plans

Equity Incentive Plans At March 31, 2017, 1,659,008 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	(114,264)	\$ 1.49	—	—
Outstanding at March 31, 2017	10,827,481	\$ 3.01	5.20	\$ 115,102
Vested and expected to vest March 31, 2017	10,773,313	\$ 3.02	5.17	\$ 113,582
Exercisable at March 31, 2017	8,355,859	\$ 3.44	4.19	\$ 48,103

No stock options were exercised during the three months ended March 31, 2017 and 2016. The Company issues new shares of common stock upon exercise of options. As there was no exercises, there was no related 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 three months ended March 31, 2017, plan participants had purchased 31,624 shares at an average purchase price of \$0.25 for total cash proceeds of \$7,000. At March 31, 2017, 203,165 shares were authorized and available for issuance under the 2004 Purchase Plan.

NOTE 6 —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 March 31, 2017 and December 31, 2016:

(in thousands)	Fair Value as of March 31, 2017	Basis of Fair Value Measurements		
		Level 1	Level 2	Level 3
Money market funds	\$ 3,102	\$ 3,102	\$ —	\$ —
Corporate debt securities	1,565	—	1,565	—
Government securities	3,199	—	3,199	—
Commercial paper	9,245	—	9,245	—
Total cash equivalents and marketable securities	\$ 17,111	\$ 3,102	\$ 14,009	\$ —

(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	—
Total cash equivalents and marketable securities	\$ 23,217	\$ 2,746	\$ 20,471	\$ —

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

As of March 31, 2017 (in thousands):	Cost Basis	Unrealized Gain	Unrealized Loss	Fair Value
Money market funds	\$ 3,102	\$ —	\$ —	\$ 3,102
Corporate debt securities	1,565	—	—	1,565
U.S. Government securities	3,200	—	(1)	3,199
Commercial paper	9,245	—	—	9,245
	17,112	—	(1)	17,111
Less cash equivalents	10,948	—	—	10,948
Total marketable securities	\$ 6,164	\$ —	\$ (1)	\$ 6,163

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
Total marketable securities	\$ 13,002	\$ 1	\$ (3)	\$ 13,000

There were no realized gains or losses in three months ended March 31, 2017 and 2016, respectively. As of March 31, 2017, the weighted average maturity for the Company’s available for sale securities was 0.5 months, 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. The following table provides the breakdown of the marketable securities with unrealized losses at March 31, 2017 (in thousands):

As of March 31, 2017 (in thousands):	In loss position for less than twelve months	
	Fair Value	Unrealized Loss
U.S. Government securities	\$ 3,199	\$ (1)

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

The Company leases certain of its facilities under noncancelable leases, which qualify for operating lease accounting treatment under ASC 840, "Leases," and, as such, these facilities are not included on its unaudited condensed consolidated balance sheets. The future rental payments required by the Company for all of its facilities under noncancelable operating leases are as follows (in thousands):

Years Ending December 31,	
2017	25
Thereafter	—
Total	<u>\$ 25</u>

Indemnification

The Company enters into indemnification provisions under its agreements with other companies in the ordinary course of business, including business partners, contractors and parties performing its clinical trials. Pursuant to these arrangements, the Company indemnifies, holds harmless, and agrees to reimburse the indemnified parties for losses suffered or incurred by the indemnified party as a result of the Company's activities. The duration of these indemnification agreements is generally perpetual. The maximum potential amount of future payments the Company could be required to make under these agreements is not determinable. The Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the estimated fair value of these agreements is minimal. The Company maintains commercial general liability insurance and products liability insurance to offset certain of its potential liabilities under these indemnification provisions. Accordingly, the Company has not recognized any liabilities relating to these agreements as of March 31, 2017.

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 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 JNDA 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 March 1, 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 tarloxotinib or HX4 is planned. We plan to present preliminary results from both trials at an upcoming medical meeting.

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, the Company entered into a Merger Agreement with Molecular Templates, Inc. (“Molecular Templates”), pursuant to which a wholly-owned subsidiary of ours will merge with and into Molecular Templates, with Molecular Templates surviving as a wholly-owned subsidiary of us. We believe that the merger will result in a pharmaceutical company focused on the development and global distribution of safer products less prone to resistance useful in the treatment of cancer and other disorders. 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 \$750,000 and reimburse certain fees and

expenses incurred by Molecular Templates. Although we have entered into the Merger Agreement and intend to consummate the merger, there is no assurance that we will be able to successfully consummate the merger on a timely basis, or at all.

If the Merger is not completed, the Company 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 in parallel with partnering TH-3424 and/or HX4 and broadening our pipeline by in-licensing or acquiring new product candidates**. We are 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, we are in the process of completing our 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, we intend to complete 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 several ISTs as described in more detail below under “Product Candidates.” TH-3424 is our small-molecule drug candidate, discovered at Threshold, being evaluated for the potential treatment of hepatocellular (liver) cancer, castrate resistant prostate cancer, T-cell acute lymphoblastic leukemias, and other cancers expressing high levels of aldo-keto reductase family 1 member C3, or AKR1C3. Tumors overexpressing AKR1C3 can be resistant to radiation therapy and chemotherapy. TH-3424 is a prodrug in preclinical development that selectively releases a potent DNA cross-linking agent in the presence of AKR1C3. Preliminary nonclinical toxicology studies including biochemical, in vitro cell-based and in vivo animal-based characterization of its pharmacological properties were presented at the 2016 Annual Meeting of the American Association for Cancer Research (AACR) in April 2016. The preliminary nonclinical studies suggested an adequate therapeutic index. We believe that the preliminary nonclinical study results warrant continued development of TH-3424 in Investigational New Drug (IND)-enabling toxicology studies in collaboration with Ascenta Pharmaceuticals, Ltd. which we expect will be completed by the fourth quarter of 2017. Our ability to advance the clinical development of evofosfamide is dependent upon our ability to obtain additional funding, including entering into new collaborative or partnering arrangements for evofosfamide, TH-3424 and/or HX4. In this regard, we are currently seeking pharmaceutical and diagnostic partners for TH-3424 and HX4 with a commercial presence in oncology. Subject to our ability to obtain additional funding, we also intend 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 TH-3424 and 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. 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 March 31, 2017 and December 31, 2016, we had cash, cash equivalents and marketable securities of \$17.6 million and \$23.6 million, respectively. The cash, cash equivalents and marketable securities as of March 31, 2017 excludes a \$2.0 million bridge loan to Molecular Templates, Inc. in the form of a promissory note. We currently have no ongoing collaborations for the development and commercialization of evofosfamide, and no source of revenue . However, we continue to seek out new strategic partners for the continued development of TH-3424, as well as new in-licensing opportunities for us and funding for those opportunities. If these efforts are not successful, we 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 substantial 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 planned Phase 1 clinical trial of evofosfamide in collaboration with researchers and clinicians at The University of Texas MD Anderson Cancer Center and our ongoing preclinical development of TH-3424, 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 cease further enrollment in all Threshold-sponsored clinical trials of evofosfamide and our decision to cease further development of tarloxotinib and, to a lesser extent, the impact of workforce reductions implemented in December 2015 and in September 2016. However, apart from the planned 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 and TH-3424, 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

Research and Development. Research and development expenses were \$1.6 million for the three months ended March 31, 2017 compared to \$6.0 million for the three months ended March 31, 2016, net of the reimbursement for Merck KGaA's 70% share of total development expenses for evofosfamide. The \$4.4 million decrease in expenses was due primarily to a \$0.9 million decrease in employee related expenses (including a \$0.2 million decrease in noncash stock-based compensation expense), a \$3.3 million decrease in clinical development expenses net of the reimbursement for Merck KGaA's 70% share of total development expenses for evofosfamide, and a decrease of \$0.2 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 months ended March 31, 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 were wound down by the end of quarter ended March 31, 2017, and multiple Phase 2 and Phase 1 clinical trials; the clinical development of tarloxotinib, which was the subject of two Phase 2 proof of concept trials, which also were in the process of winding down; and our discovery research program aimed at identifying new drug candidates. 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 development expenses in the case of evofosfamide for 2016) attributable to each of our programs for each period presented:

Research and Development Expenses by Project (in thousands):	Three Months Ended March 31,	
	2017	2016
Evofosfamide	\$ 776	\$ 4,278
Tarloxotinib	561	1,332
Discovery Research	253	395
Total Research and Development Expenses	\$ 1,590	\$ 6,005

Research and development expenses associated with our internally discovered compound evofosfamide were \$ 0.8 million for the three months ended March 31, 2017 and \$ 4.3 million for the three months ended March 31, 2016 , in each case net of the reimbursement or payment for Merck KGaA's 70% share of total eligible collaboration expenses for evofosfamide . The decrease of \$ 3.5 million for the three months ended March 31, 2017 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 development expenses associated with tarloxotinib were \$0.6 million for the three months ended March 31, 2017 compared to \$1.3 million for the three months ended March 31, 2016. The decrease of \$0.7 million 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, we expect activities to be limited to winding down the trials in the first half of 2017. Discovery research and development expenses were \$0.2 million for the three months ended March 31, 2017 compared to \$0.3 million for the three months ended March 31, 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 are 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 and TH-3424 , or to otherwise obtain sufficient additional funding to permit such development. In the event we enter into partnering or collaborative arrangements for evofosfamide or TH-3424, the preclinical development or 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 \$ 2.9 million for the three months ended March 31, 2017 compared to \$ 2.2 million for three months ended March 31, 2016. The \$0.7 million increase was due to a \$0.9 million increase in consulting expenses partially offset by a \$0.2 million decrease in employee related expenses. Consulting expenses increased as result of an increase in legal and other consulting expenses related to 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 merger-related 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 months ended March 31, 2017 was \$33,000 compared to \$32,000 of interest income for same period in 2016.

Other Income (Expense). Other income (expense) for the three months ended March 31, 2017 was non-cash expense of \$0.7 million compared to non-cash income of \$0.4 million for the three months ended March 31, 2016. The non-cash expense during the three months ended March 31, 2017 was due to a net increase in the fair value of the outstanding warrants as result of an increase in the underlying price of the common stock during the period. The non-cash income during the three months ended March 31, 2016 was due to a net decrease in the fair value of the outstanding warrants as result of a decrease in the underlying price of the common stock during the 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 and through payments received under our former collaboration with Merck KGaA. We have received \$110 million in upfront and milestone payments from our former collaboration with Merck KGaA. We had cash, cash equivalents and marketable securities of \$17.6 million and \$23.6 million at March 31, 2017 and December 31, 2016, respectively, available to fund operations. The cash, cash equivalents and marketable securities as of March 31, 2017 excludes a \$2.0 million bridge loan to Molecular Templates, Inc. in the form of a promissory note.

Net cash used in operating activities for the three months ended March 31, 2017 was \$4.1 million compared to net cash used in operating activities of \$10.6 million for the three months ended March 31, 2016. The decrease of \$6.5 million in cash used in operations was due to a decrease in payments of operating cash expenses, partially offset by a decrease in the 70% cash reimbursement of expenses related to our former collaboration with Merck KGaA.

Net cash provided by investing activities for the three months ended March 31, 2017 was \$4.9 million compared with net cash provided by investing activities of \$12.2 million for the three months ended March 31, 2016. The \$7.3 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.

Net cash provided by financing activities for the three months ended March 31, 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 and tarloxotinib, 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 or 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 The NASDAQ 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

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

During the three months ended March 31, 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

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 are currently evaluating the impact of this accounting standard update on our consolidated financial statements.

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 us beginning in the first quarter of fiscal year 2018 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 are currently evaluating the impact the standard will have on our financial statements.

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 statement of operations.

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 three months ended March 31, 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 March 31, 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 March 31, 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 March 31, 2017 to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

ITEM 1A. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings.

ITEM 1B. RISK FACTORS

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition or results of operations. The risks described below are not the only ones we face. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. Our business could be harmed by any of these risks. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing these risks, you should refer to the other information contained in this annual report on Form 10-Q, including our condensed consolidated financial statements and related notes.

Risks Related to Our Business

Our strategic transaction with Molecular Templates may not be consummated or may not deliver the anticipated benefits we expect.

In March 2017, we entered into a Merger Agreement with Molecular Templates pursuant to which the shareholders of Molecular Templates will become the majority owners of Threshold. In addition the proposed \$20 million commitment from Longitude 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”). The Merger, however, is not conditioned upon the closing of the Financing. We are devoting substantially all of our time and resources to consummating the Merger and the Financing, however, there can be no assurance that such activities will result in the consummation of the Merger and the Financing or that such transaction will deliver the anticipated benefits or enhance shareholder value. We cannot assure you that we will complete the Transaction 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, our board of directors may elect to attempt to complete another strategic transaction similar to the Merger and the Financing. Attempting to complete another similar strategic transaction will be costly and time-consuming, and we cannot make any assurances that a future strategic transaction will occur on terms that provide the same or greater opportunity for potential value to our stockholders, or at all. If we are unable to close another strategic transaction and unable to successfully obtain funding for the continued development of evofosfamide and/or partner TX-3424 or HX4, our board of directors may determine to sell or otherwise dispose of our various assets, and distribute any remaining cash proceeds to our 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, 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 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 have suspended all further development of tarloxotinib.

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 quarter ended March 31, 2017 was \$ 5.1 million and as of March 31, 2017, we had an accumulated deficit of \$35 8.6 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 were 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 March 31, 2017, Threshold had cash and cash equivalents totaling \$17.6 million. The cash, cash equivalents and marketable securities as of March 31, 2017 excludes a \$2.0 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 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 \$17.6 million at March 31, 2017. The cash, cash equivalents and marketable securities as of March 31, 2017 excludes a \$2.0 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 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.

The Merger Agreement has set the exchange ratio for the Molecular Templates common stock, and the exchange ratio is only adjustable upward or downward if the net cash of the Company changes, prior to completion of the Merger. Any changes in the market price of Threshold common stock before the completion of the Merger will not affect the number of shares Molecular Templates security holders will be entitled to receive pursuant to the Merger Agreement.

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 \$2.0 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 resulting from the execution, delivery, announcement or performance of obligations under the Merger Agreement or the announcement or pendency or anticipated consummation of the merger or any related transactions;
- 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 conditions generally affecting the industries in which Molecular Templates and Threshold and their respective subsidiaries participate or the United States or global economy or capital markets as a whole to the extent such conditions do not have a disproportionate impact on Molecular Templates or Threshold and their respective subsidiaries, as applicable;
- 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; or
- the resignation or termination of a key director or officer of Molecular Templates or Threshold.

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, consummation of the concurrent financing is subject to conditions and is not a condition to closing the merger. If Molecular and Threshold complete the merger, but they do not complete the concurrent financing, 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, 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 minimum condition has been satisfied. The closing of the merger is not contingent upon the completion of this 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, which, assuming the conditions to the closing of the concurrent financing are satisfied, will take place immediately following the completion of the merger. Since the concurrent financing is subject to conditions and is not a condition to the merger, Molecular and Threshold may complete the merger but not the concurrent 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 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 \$1.4 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 organization 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 in their respective companies without receiving any commensurate benefit, or only receiving part of the commensurate benefit to the extent the combined organization 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 Financing, which is 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.

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.

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.

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.

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 planned 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 planned 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. 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. 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 of 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 planned 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 TH-3424 and 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.

Dependence on partnering, collaborative or other strategic arrangements subjects us to a number of risks, including:

- we may not be able to control the amount and timing of resources that our potential strategic partners may devote to our product candidates;
- potential strategic partners may experience financial difficulties or changes in business focus;
- we may be required to relinquish important rights such as marketing and distribution rights;
- should a strategic partner fail to develop or commercialize one of our compounds or product candidates, we may not receive any future milestone payments and will not receive any royalties for the compound or product candidate;
- business combinations or significant changes in a strategic partner's business strategy may also adversely affect a collaborator's willingness or ability to complete its obligations under any arrangement;
- under certain circumstances, a strategic partner could move forward with a competing product candidate developed either independently or in collaboration with others, including our competitors; and
- partnering, collaborative and other strategic arrangements are often terminated or allowed to expire, which could delay the development and may increase the cost of developing our product candidates.

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 planned 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 our Phase 2 proof-of-concept trials of tarloxotinib, 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 IDMC 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. Further more, 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.

Evofosfamide 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 planned 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 quarter ended March 31, 2017 we had a net loss of \$5.1 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 K GaA'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 planned 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 planned 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 or 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 team 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 South San Francisco, California, near active earthquake zones. In the event of a natural disaster, such as an earthquake, drought or flood, or localized extended outages of critical utilities or transportation systems, we do not have a formal business continuity or disaster recovery plan, and could therefore experience a significant business interruption. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and could result in additional expense. Although we maintain business interruption insurance coverage, the policy specifically excludes coverage for earthquake and flood.

Risks Related to Our Dependence on Third Parties

We rely on third parties to manufacture 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 planned 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- and AKR1C3 -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 March 31, 2017, we had cash and cash equivalents totaling \$17.6 million. The cash, cash equivalents and marketable securities as of March 31, 2017 excludes a \$2.0 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 March 31, 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 March 31, 2017, there were 10,827,481 shares of our common stock issuable upon the exercise of outstanding options having a weighted-average exercise price of \$3.01 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

Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing.

As previously reported, on November 11, 2016, Threshold Pharmaceuticals, Inc. (the “Company”) received a notice from the 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 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), the Company had 180 calendar days, or until May 10, 2017, to regain compliance with the Bid Price Rule. The Company subsequently requested an additional 180 calendar day compliance period to address the bid price deficiency through November 6, 2017.

On May 11, 2017, the Staff granted the Company’s request for an extension to comply with the minimum \$1.00 bid price requirement through November 6, 2017, by which date the Company must evidence compliance for at least ten consecutive business days. If compliance cannot be demonstrated by November 6, 2017, the Staff will provide written notification that the Company’s securities will be delisted. In the event of such a notification, the Company may appeal the Staff’s determination to delist its securities, but there can be no assurance the Staff would grant the Company’s request for continued listing. If the Company has not regained compliance in sufficient time, the Company’s Board of Directors may implement a reverse stock split to regain compliance with the minimum bid price requirement. The Company is monitoring the bid price of its common stock and will consider options available to it to potentially achieve compliance before November 6, 2017.

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.

<u>Exhibit Number</u>	<u>Description</u>
10.1	Form of Equity Commitment Letter by and between Registrant, Molecular Templates, Inc. and Longitude Venture Partners III, L.P., dated as of March 16, 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.
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.
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 Act or 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: May 15, 2017

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

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

Date: May 15, 2017

/s/ Joel A. Fernandes

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

E XHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
10.1	Form of Equity Commitment Letter by and between Registrant, Molecular Templates, Inc. and Longitude Venture Partners III, L.P., dated as of March 16, 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.
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350.
32.2*	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350.
101.INS	XBRL Instance Document.
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* 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.

March 16, 2017

Threshold Pharmaceuticals, Inc.
170 Harbor Way, Suite 300
South San Francisco, CA 94080

Molecular Templates, Inc.
9301 Amberglen Boulevard, Suite 100
Austin, TX 78729

Re: Equity Commitment

Ladies and Gentlemen:

Reference is made to the Agreement and Plan of Merger and Reorganization, dated as of the date hereof (as it may be amended from time to time, the "Merger Agreement"), by and among Threshold Pharmaceuticals, Inc., a Delaware corporation ("Parent"), Trojan Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Parent ("Merger Sub"), and Molecular Templates, Inc., a Delaware corporation (the "Company"), pursuant to which Merger Sub will merge with and into the Company, with the Company surviving as the surviving corporation (the "Merger"). Capitalized terms used but not defined herein have the meanings ascribed to them in the Merger Agreement.

This letter agreement is being delivered by Longitude Venture Partners III, L.P. (the "Investor") to Parent and the Company in connection with the execution of the Merger Agreement by Parent and the Company. The Investor hereby confirms its irrevocable commitment, subject to the conditions set forth herein, to purchase, or cause an assignee permitted by paragraph eight hereof to purchase, immediately following the Effective Time, units ("Units") having an aggregate purchase price equal to \$20,000,000 (the "Equity Commitment"), at a price per Unit of \$5.0625 (the "Per Unit Price"), each Unit to consist of (i) one (1) share (collectively, the "Shares") of common stock of Parent, \$0.001 par value per share ("Parent Common Stock"), and (ii) a warrant (collectively, the "Warrants") to purchase 0.50 shares of Parent Common Stock with an exercise price equal to \$5.00 per share (the "Exercise Price"). The Per Unit Price (less the \$0.0625 per Unit ascribed to the Warrant) and the Exercise Price of the Warrant each reflect the effect of a reverse stock split anticipated to be effected by Parent's Board of Directors prior to the Merger (the "Reverse Split") at an assumed Reverse Split ratio of 8.1970-to-1 (the "Assumed Reverse Split Ratio").

The parties agree that each of the Per Unit Price (less the \$0.0625 per Unit ascribed to the Warrant) and the Exercise Price will be appropriately adjusted to the extent the actual Reverse Split ratio effected by Parent's Board of Directors (the "Actual Reverse Split Ratio") differs from the Assumed Reverse Split Ratio. For example and for illustration purposes only: (1) if the Actual Reverse Split Ratio were to be 6.6666-to-1, the Per Unit Price would be adjusted to \$4.12906 (reflecting \$4.0665 per Share (which would also be the adjusted Exercise Price) and \$0.0625 per Warrant); and (2) if the Actual Reverse Split Ratio were to be 10.0000-to-1, the Per Unit Price would be adjusted to \$6.1623 (reflecting \$6.0998 per Share (which would also be the

adjusted Exercise Price) and \$0.0625 per Warrant). For the avoidance of doubt, there will be no adjustment to the composition of the Unit as a result of an Actual Reverse Split Ratio that differs from the Assumed Reverse Split Ratio (i.e., a Unit shall remain one (1) share of Parent Common Stock and a Warrant to purchase 0.50 shares of Parent Common Stock).

The Units to be purchased by the Investor are referred to herein as the “Investor Units,” and the Investor Units, the Shares, the Warrants and the shares of Parent Common Stock issuable upon exercise of the Warrants (the “Warrant Shares”) are referred to collectively herein as the “Securities”. The Investor acknowledges that Parent intends to issue Units with an aggregate purchase price of at least \$40,000,000 (inclusive of the Investor Units) to one or more investors immediately following the Effective Time (the “Financing”) and that the Equity Commitment is a component of the Financing. Parent hereby confirms its commitment, subject to the conditions herein, to enter into the Equity Purchase Documents and issue and sell to Investor in the Financing the Investor Units for an amount equal to the Equity Commitment at the Per-Unit Price immediately following the closing of the Merger.

The Investor’s obligation to enter into the Equity Purchase Documents and fund the Equity Commitment is subject only to (i) the execution and delivery of the Merger Agreement, (ii) the consummation of the Merger, (iii) the receipt by Parent of additional equity financing commitments by third parties mutually and reasonably acceptable to Parent, Mercury and Investor to participate in the Financing in an aggregate amount not less than an additional \$20,000,000 (the “Additional Commitment”) (which condition may be waived in the sole discretion of Investor); (iv) the non-existence of a Mercury Material Adverse Effect and a Trojan Material Adverse Effect (which condition may be waived in the sole discretion of Investor on behalf of all other investors); (v) the delivery of resolutions of Parent’s Board of Directors certified by the Corporate Secretary of Parent or evidence of other corporate action by Parent reasonably acceptable to the Investor to effect the appointment or election of David Hirsch, M.D., Ph.D. to Parent’s Board of Directors effective upon the closing of the Financing; and (vi) the terms of this letter agreement. Parent shall use the proceeds from the Equity Commitment in its sole discretion, as directed by Parent’s Board of Directors and without any limitation or condition whatsoever from the Investor.

The Investor and Parent hereby covenant to enter into a Securities Purchase Agreement in substantially the form of Exhibit A hereto, a Registration Rights Agreement in substantially the form of Exhibit B hereto, a Warrant in substantially the form of Exhibit C hereto and such other agreements as may be reasonably requested by Parent, the Company and Investor in connection therewith (collectively, the “Equity Purchase Documents”), which agreements shall set forth (i) the terms on which the Investor (or its successors or permitted assigns) shall purchase the Investor Units for an amount equal to the Equity Commitment at the Per Unit Price immediately following the closing of the Merger, including a covenant and condition satisfactory to the Investor with regard to the appointment of Dr. Hirsch to Parent’s Board of Directors effective upon the closing of the Financing and the payment of the costs and expenses of the Investor related to the Financing (including Investor’s reasonable attorney fees) not to exceed an aggregate of \$175,000 and payable only upon the consummation of the Financing; (ii) certain registration rights with respect to the Shares and the Warrant Shares under the Securities Act of 1933, as amended, and the rules promulgated thereunder (the “Securities Act”) (which shall include, without limitation, Parent’s obligation to (a) file a registration statement with respect to

the resale of the Shares and the Warrant Shares with the U.S. Securities and Exchange Commission (the “SEC”) within 60 days after the closing date of the issuance and sale of the Units; (b) use its commercially reasonable efforts to have the registration statement declared effective by the SEC as soon as possible after the initial filing, and in any event no later than 120 days after the closing date of the issuance and sale of the Units; and (c) keep the registration statement effective until all registrable securities may be sold pursuant to Rule 144 under the Securities Act, without restriction as to volume); (iii) with respect to the Warrants, that such Warrants shall (a) be exercisable at a per-share price equal to the Exercise Price, which Exercise Price shall be payable in cash or through a “cashless” exercise mechanic, (b) not be subject to any anti-dilution protection (other than customary structural anti-dilution protection) and (c) expire upon the seven (7)-year anniversary of the Effective Time; and (iv) other customary terms and conditions, each of which shall be on terms reasonably consistent with similar agreements by public companies similarly situated with Parent and reasonably acceptable to the Investors; provided, that, in no event shall the obligation of the Investor to purchase the Investor Units be conditioned the completion by the Investor of its due diligence investigation with respect to the Equity Commitment. Parent covenants to Investor to include in the definitive proxy statement related to the Merger, a proposal to its stockholders to vote on the Financing.

The Investor represents and warrants that (i) it has the requisite power, capacity and authority to execute and deliver this letter agreement and to fulfill and perform its obligations hereunder; (ii) this letter agreement has been duly and validly executed and delivered by the Investor and constitutes a legal, valid and binding agreement of the Investor and is enforceable in accordance with its terms (subject to the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other similar laws affecting creditors’ rights generally and general equitable principles whether considered in a proceeding in law or in equity); (iii) the execution, delivery and performance of this letter agreement by the Investor has been duly and validly authorized and approved by all necessary corporate, limited partnership or similar action by such party; (iv) the Investor has available, unrestricted cash (or the unrestricted right (subject only to the giving of any required notices) to obtain from its investors’ funds) sufficient to pay and perform in full its obligation under this letter agreement to pay the Equity Commitment, which funds shall remain available to the Investor for so long as this letter agreement shall remain in effect; (v) the Investor has received and reviewed (or has had sufficient opportunity to review) this letter agreement (including the forms of Equity Purchase Documents attached hereto) with independent legal, accounting and financial advisors regarding the Investor’s rights and obligations and the Investor fully understands the terms and conditions contained, and the transactions provided for, herein and therein; and (vi) the Investor understands that the issuance of the Units pursuant to the Equity Purchase Documents will be a private placement exempt from registration under Section 4(a)(2) and Regulation D under the Securities Act and that such exemption shall rely, in part, on the representations and warranties of the Investor included in paragraph six hereof and the Equity Purchase Documents.

The Investor further acknowledges and represents that (i) the Securities will be “restricted securities” and will not, at the time of issuance, have been registered under the Securities Act or any applicable state securities law; (ii) the Investor is acquiring the Securities as principal for its own account and not with a view to, or for, distributing or reselling the Securities or any part thereof in violation of the Securities Act or any applicable state securities laws; (iii) the Investor does not presently have any agreement, plan or understanding, directly or indirectly, with any

Person to distribute or effect any distribution of any of the Securities (or any securities which are derivatives thereof) to or through any person or entity; (iv) the Investor will acquire the Securities in the ordinary course of its business; (v) the Investor is not a registered broker-dealer under Section 15 of the Securities Exchange Act of 1934, as amended, or an entity engaged in a business that would require it to be so registered as a broker-dealer; (vi) the Investor is, at the date hereof, an “accredited investor” as defined in Rule 501(a) under the Securities Act; (vii) the Investor will not be purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general advertisement; (viii) the Investor, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment; (ix) the Investor is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment; (x) the Investor acknowledges that it has reviewed publicly available materials relating to the Parent and has been afforded (a) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company and Parent concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities, (b) access to information about the Company, Parent and their subsidiaries and their respective financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (c) the opportunity to obtain such additional information that the Company and Parent possess or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment; and (xi) the Investor has sought such accounting, legal and tax advice as it has considered necessary to make an informed decision with respect to its commitment to acquire the Securities.

Parent may, on or after the date hereof, issue a press release disclosing the material terms of the transactions contemplated by this letter agreement and may, on or after the date hereof, file a Current Report on Form 8-K describing the terms of this letter agreement and including the press release and a copy of this letter agreement and forms of the Equity Purchase Documents, as exhibits thereto or a subsequent periodic report, with the SEC.

This letter agreement shall be binding solely on, and inure solely to the benefit of, each of the undersigned and their respective successors and permitted assigns. The Investor may not assign the Equity Commitment to any third party, provided, that the Investor may assign all or a portion of its obligations to fund the Equity Commitment to its affiliates or affiliated funds or, with the prior written consent of Parent and the Company, to any third party (without consideration therefor); provided, however, that the Investor shall remain liable for the Equity Commitment.

The parties hereto agree that irreparable damage would occur if any provision of this letter agreement were not performed in accordance with the terms hereof and that Parent, the Company or the Investor, as the case may be, shall be entitled to an injunction or injunctions to prevent breaches of this letter agreement or to enforce specifically the performance of the terms and provisions hereof in any federal court located in the State of Delaware or any Delaware state court, in addition to any other remedy to which they are entitled at law or in equity. The parties

hereto hereby agree not to raise any objections to the equitable remedy of specific performance to prevent or restrain breaches or threatened breaches of this letter agreement, and to specifically enforce the terms and provisions of this letter agreement to prevent breaches or threatened breaches of, or to enforce compliance with, the covenants and obligations of the Investor under this letter agreement.

In the event that any suit or action is instituted with respect to this letter agreement, the prevailing party in such dispute shall be entitled to recover from the losing party all reasonable fees, costs and expenses of such prevailing party in connection with any such suit or action, including without limitation, such reasonable fees and expenses of attorneys and accountants, which shall include, without limitation, all reasonable fees, costs and expenses of appeals.

This letter agreement and any related dispute shall be governed by, and construed and interpreted in accordance with, the laws of the State of Delaware applicable to contracts executed in and to be performed in that State. Each of the parties hereto hereby (i) irrevocably submit to the personal jurisdiction of the Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware (or, if the Delaware Court of Chancery declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware) in the event that any dispute arises out of this letter agreement or any of the transactions contemplated by this letter agreement; (ii) agree that it will not attempt to deny or defeat such personal jurisdiction or venue by motion or other request for leave from any such court; and (iii) agree that it will not bring any action relating to this letter agreement or any of the transactions contemplated by this letter agreement in any court other than the Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware (or, if the Delaware Court of Chancery declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware).

EACH OF THE PARTIES HERETO HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS LETTER AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREBY.

This letter agreement may not be amended or otherwise modified without the prior written consent of Parent, the Company and the Investor. This letter agreement may be executed in counterparts.

This letter agreement shall expire upon the earlier of (1) June 30, 2017 if Parent has not secured commitment letters for the Additional Commitment unless prior to such date Investor has waived such condition or (2) termination of the Merger Agreement in accordance with its terms. Nothing in this paragraph shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this letter agreement, the Equity Purchase Documents or the Merger Agreement or impair the right of any party to compel specific performance by any other party of its obligations under this letter agreement.

[*Signature page follows*]

Sincerely,

LONGITUDE VENTURE PARTNERS III, L.P.

By: Longitude Capital Partners III, LLC
Its: General Partner

By: /s/ Patrick Enright
Name: Patrick Enright
Title: Managing Member

Accepted and agreed to as of the date first above written.

THRESHOLD PHARMACEUTICALS, INC.

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

MOLECULAR TEMPLATES, INC.

By: /s/ Erick Poma, Ph.D.
Name: Erick Poma, Ph.D.
Title: Chief Executive Officer

**FORM OF
SECURITIES PURCHASE AGREEMENT**

THIS SECURITIES PURCHASE AGREEMENT (this “Agreement”) is made as of [●], 2017 (the “Effective Date”) by and among Molecular Templates, Inc. (which name, prior to the closing of the Merger, was Threshold Pharmaceuticals, Inc.), a Delaware corporation (the “Company”), and each of those persons and entities, severally and not jointly, identified as an Investor on the Schedule of Investors attached as Exhibit A hereto (the “Schedule of Investors”). Such persons and entities together with their permitted successors and assigns, are referred to collectively as the “Investors” and each individually as an “Investor”. The Company and the Investors may each be referred to herein individually as a “Party” and collectively as the “Parties.”

RECITALS

A. Reference is made to that certain Agreement and Plan of Merger and Reorganization (the “Merger Agreement”), dated as of March [●], 2017, by and among Molecular Templates, Inc. (“Molecular”), the Company, and Trojan Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of the Company (“Merger Sub”), pursuant to which, at the Effective Time, Merger Sub merged with and into Molecular with Molecular remaining as the surviving entity after the merger and a wholly owned subsidiary of the Company (the “Merger”). At the Effective Time, the Company’s certificate of incorporation was amended to change its legal name from “Threshold Pharmaceuticals, Inc.” to “Molecular Templates, Inc.”

B. The Parties are executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act and the provisions of Regulation D (“Regulation D”) or other applicable exemptions from registration, as promulgated by the U.S. Securities and Exchange Commission (the “SEC”) under the Securities Act.

C. The Investors wish to purchase, severally but not jointly, from the Company, and the Company wishes to sell and issue to the Investors, immediately following the closing of the Merger and upon the terms and conditions stated in this Agreement, units (“Units”) having an aggregate purchase price of \$40,000,000, each such Unit consisting of (i) one (1) share of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), and (ii) a warrant to purchase 0.50 shares of Common Stock (the “Warrants”); provided that, for the avoidance of doubt, all share numbers and prices referenced in this Agreement are subsequent to the []-for-1 reverse split that became effective concurrently with the Effective Time (the “Reverse Split”).

D. Contemporaneously with the execution and delivery of this Agreement, the Parties will execute and deliver a Registration Rights Agreement, in the form attached hereto as Exhibit A (the “Registration Rights Agreement”), pursuant to which the Company agrees to provide certain registration rights with respect to the Shares and the Warrant Shares under the Securities Act and applicable state securities Laws.

In consideration of the mutual promises made herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS. IN ADDITION TO THOSE TERMS DEFINED ELSEWHERE IN THIS AGREEMENT, FOR THE PURPOSES OF THIS AGREEMENT, THE FOLLOWING TERMS SHALL HAVE THE MEANINGS SET FORTH BELOW:

“Affiliate” means, with respect to any Person, any other Person which directly or indirectly through one or more intermediaries Controls, is controlled by, or is under common Control with, such Person.

“Business Day” means any day, other than a Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

“Company’s Knowledge” means the actual knowledge of the executive officers (as defined in Rule 405 under the Securities Act) of the Company and any executive officers of the Subsidiaries.

“Contract” means any written agreement, contract, subcontract, lease, understanding, arrangement, instrument, note, option, warranty, purchase order, license, sublicense, insurance policy, benefit plan or legally binding commitment or undertaking of any nature.

“Control” (including the terms “controlling,” “controlled by” or “under common control with”) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a Person, whether through the ownership of voting securities, by contract or otherwise.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

“Insider” means each director, executive officer, other officer of the Company participating in the offering, any beneficial owner of twenty percent (20%) or more of the Company’s outstanding voting equity securities, calculated on the basis of voting power, and any promoter connected with the Company in any capacity on the Effective Date.

“Law” or “Laws” means any federal, state, local, municipal, foreign or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any governmental authority.

“Material Adverse Effect” means a material adverse effect on (i) the assets, results of operations, financial condition, business or prospects of the Company and its Subsidiaries taken as a whole or (ii) the ability of the Company to perform its obligations under the Transaction Documents; provided that any of the following, either alone or in combination, shall not be deemed a Material Adverse Effect: (a) effects caused by changes or circumstances affecting general market conditions in the U.S. economy or elsewhere in the world or which are

generally applicable to the industry in which the Company operates; (b) effects resulting from or relating to the announcement or disclosure of the sale of the Securities or the other transactions contemplated by this Agreement; (c) effects resulting from any changes in the share price or trading volume of the Common Stock; (d) effects caused by any change in Law; and (e) effects caused by any event, occurrence or condition resulting from or relating to the taking of any action in accordance with this Agreement.

“Order” means any order, writ, injunction, judgment or decree.

“Person” means an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

“Purchase Price” means \$[_____] per Unit.

“Registration Statement” has the meaning set forth in the Registration Rights Agreement.

“Required Investors” means the Investors beneficially owning (calculated in accordance with Rule 13d-3 under the Exchange Act) a majority of the aggregate outstanding Shares.

“Securities” means the Units, the Shares, the Warrants and the Warrant Shares.

“Securities Act” means the Securities Act of 1933, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

“Shares” means the aggregate number of shares of Common Stock being purchased by the Investors hereunder.

“Subscription Amount” means, with respect to each Investor, the aggregate amount to be paid for the Units purchased by such Investor hereunder as indicated on such Investor’s signature page hereto next to the heading “Aggregate Purchase Price (Subscription Amount)” in United States dollars .

“Subsidiary” of any Person means another Person, an amount of the voting securities, other voting ownership or voting partnership interests of which is sufficient to elect at least a majority of its Board of Directors or other governing body (or, if there are no such voting interests, fifty percent (50%) or more of the equity interests of which) is owned directly or indirectly by such first Person. For clarity, for purposes of this Agreement Molecular Templates, Inc. shall be considered a Subsidiary of the Company.

“Transaction Documents” means this Agreement, the Warrants and the Registration Rights Agreement.

“Warrant Shares” means the shares of Common Stock issuable upon exercise of or otherwise pursuant to the Warrants.

2. PURCHASE AND SALE OF THE UNITS. SUBJECT TO THE TERMS AND CONDITIONS OF THIS AGREEMENT, AT THE CLOSING, EACH INVESTOR SHALL SEVERALLY, AND NOT JOINTLY, PURCHASE, AND THE COMPANY SHALL SELL AND ISSUE TO SUCH INVESTOR, SUCH NUMBER OF UNITS EQUAL TO THE QUOTIENT RESULTING FROM DIVIDING (I) THE SUBSCRIPTION AMOUNT FOR SUCH INVESTOR BY (II) THE PURCHASE PRICE, ROUNDED DOWN TO THE NEAREST WHOLE SHARE. THE WARRANTS SHALL HAVE AN EXERCISE PRICE EQUAL TO \$[____] PER WARRANT SHARE (SUBJECT TO ADJUSTMENT AS PROVIDED IN SUCH WARRANTS).

3. CLOSING. THE CLOSING OF THE ISSUANCE AND SALE OF THE UNITS (THE “CLOSING”) SHALL OCCUR REMOTELY VIA THE EXCHANGE OF DOCUMENTS AND SIGNATURES ON THE EFFECTIVE DATE, WHICH CLOSING SHALL OCCUR IMMEDIATELY AFTER AND ON THE SAME DAY AS THE EFFECTIVE TIME OF THE MERGER. AT THE CLOSING, EACH INVESTOR SHALL DELIVER OR CAUSE TO BE DELIVERED TO THE COMPANY THE SUBSCRIPTION AMOUNT FOR SUCH INVESTOR, VIA WIRE TRANSFER OF IMMEDIATELY AVAILABLE FUNDS PURSUANT TO THE WIRE INSTRUCTIONS DELIVERED TO SUCH INVESTOR BY THE COMPANY PRIOR TO THE CLOSING. PROMPTLY AFTER THE CLOSING, THE COMPANY SHALL (I) INSTRUCT THE TRANSFER AGENT FOR THE COMMON STOCK (THE “TRANSFER AGENT”) TO CREDIT EACH INVESTOR THE NUMBER OF SHARES SET FORTH ON SUCH INVESTOR’S SIGNATURE PAGE HERETO (AND, UPON REQUEST OF SUCH INVESTOR, SHALL INSTRUCT THE TRANSFER AGENT TO DELIVER STOCK CERTIFICATES TO SUCH INVESTOR REPRESENTING SUCH SHARES) AND (II) DELIVER TO EACH INVESTOR A WARRANT, EXECUTED BY THE COMPANY AND REGISTERED IN THE NAME OF SUCH INVESTOR, EXERCISABLE FOR THE NUMBER OF WARRANT SHARES AS INDICATED ON SUCH INVESTOR’S SIGNATURE PAGE HERETO NEXT TO THE HEADING “UNDERLYING SHARES SUBJECT TO WARRANT”.

[NOTE: REPRESENTATIONS AND WARRANTIES
SUBJECT TO FURTHER NEGOTIATION BY THE PARTIES]

4. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. THE COMPANY HEREBY REPRESENTS AND WARRANTS TO THE INVESTORS THAT, EXCEPT AS SET FORTH IN THE SCHEDULES DELIVERED HERewith (COLLECTIVELY, THE “DISCLOSURE SCHEDULE”) OR AS DISCLOSED IN THE SEC FILINGS, AS OF THE EFFECTIVE DATE:

4.1 Organization, Good Standing and Qualification. Each of the Company and its Subsidiaries is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction of its incorporation and has all requisite corporate power and authority to carry on its business as now conducted and to own its assets. Each of the Company and its Subsidiaries is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction in which the nature of its business makes such qualification necessary unless the failure to so qualify or be in good standing would not reasonably be expected to have a Material Adverse Effect.

4.2 Authorization. The Company has all requisite corporate power and authority and has taken all requisite action on the part of the Company, its officers, directors and stockholders necessary for (i) the authorization, execution and delivery of the Transaction Documents, (ii) the authorization of the performance of all obligations of the Company hereunder or thereunder and (iii) the authorization, issuance (or reservation for issuance) and delivery of the Securities. The Transaction Documents constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar Laws of general applicability, relating to or affecting creditors’ rights generally and to general equitable principles.

4.3 Capitalization.

(a) As of the Effective Date (and as of immediately following the Effective Time), the authorized capital stock of the Company consists of (i) [●] shares of Common Stock, of which [●] shares are issued and outstanding as of immediately following the Effective Time, and (ii) [●] shares of preferred stock, par value \$0.001 per share, of which no shares are outstanding as of the Effective Date. No shares of capital stock are held in Company’s treasury. All outstanding shares of Common Stock are duly authorized, validly issued, fully paid and non-assessable and were issued in compliance with all applicable federal and state securities Laws.

(b) As of the Effective Date (and as of immediately following the Effective Time), the Company had reserved an aggregate of [●] shares of Common Stock, net of exercises, for issuance to employees, consultants and non-employee directors pursuant to the [*Company Equity Plan*], under which options were outstanding for an aggregate of [●] shares of Common Stock. All shares of Common Stock subject to issuance as aforesaid, upon issuance on the terms and conditions specified in the instruments pursuant to which they are issuable, would be duly authorized, validly issued, fully paid and non-assessable.

(c) Except for the outstanding warrants set forth in Section 4.3 of the Disclosure Schedule, there are no: (i) outstanding subscription, option, call, warrant or right

(whether or not currently exercisable) to acquire any shares of the capital stock or other securities of the Company or any Subsidiary thereof; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of the Company or any Subsidiary thereof; (iii) stockholder rights plan (or similar plan commonly referred to as a “poison pill”) or Contract under which the Company or any Subsidiary thereof are or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities; or (iv) condition or circumstance that may give rise to or provide a basis for the assertion of a claim by any Person to the effect that such Person is entitled to acquire or receive any shares of capital stock or other securities of the Company or any Subsidiary thereof. There are no outstanding or authorized stock appreciation, phantom stock, profit participation, restricted stock units, equity-based awards or other similar rights with respect to the Company or any Subsidiary thereof.

(d) Except as set forth in Section 4.3 of the Disclosure Schedule, (i) none of the outstanding shares of Common Stock are entitled or subject to any preemptive right, right of repurchase or forfeiture, right of participation, right of maintenance or any similar right; (ii) none of the outstanding shares of Common Stock are subject to any right of first refusal in favor of the Company; (iii) there are no outstanding bonds, debentures, notes or other indebtedness of the Company or any Subsidiary thereof having a right to vote on any matters on which the stockholders of Company have a right to vote; and (iv) there is no Contract to which the Company or any Subsidiary thereof is a party relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or from granting any option or similar right with respect to), any shares of Common Stock (other than the Registration Rights Agreement and this Agreement). Neither the Company nor any Subsidiary thereof is under any obligation, or is bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Common Stock or other securities.

4.4 Valid Issuance. The Shares have been duly and validly authorized and, when issued and paid for pursuant to this Agreement, will be validly issued, fully paid and nonassessable, and shall be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer imposed by applicable securities Laws. The Warrants have been duly authorized and, when issued and paid for in accordance with the terms of the Transaction Documents, will be duly and validly issued, and shall be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer imposed by applicable securities Laws. The Warrant Shares issuable upon exercise of the Warrants have been duly authorized and, when issued and paid for in accordance with the terms of the Warrants, will be duly and validly issued, fully paid and nonassessable, and shall be free and clear of all encumbrances and restrictions (other than those created by the Investors), except for restrictions on transfer imposed by applicable securities Laws.

4.5 Consents. The execution, delivery and performance by the Company of the Transaction Documents and the offer, issuance and sale of the Securities require no consent of, action by or in respect of, or filing with, any governmental authority other than those that have been made or obtained prior to the Effective Date and post-sale filings pursuant to securities Laws and the rules and regulations of The NASDAQ Stock Market LLC, which the Company undertakes to file within the applicable time periods.

4.6 SEC Filings.

(a) The Company has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Exchange Act for the three (3)-year period preceding the Effective Date (or such shorter period as the Company was required by Law to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Filings”).

(b) At the time of filing thereof, or to the extent corrected by a subsequent filing, the SEC Filings complied as to form in all material respects with all applicable requirements of the Exchange Act and did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading.

(c) Each registration statement and any amendment thereto filed by the Company during the three (3) year period preceding the Effective Date pursuant to the Securities Act, as of the date such statement or amendment became effective, complied as to form in all material respects with the Securities Act and did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein not misleading; and each prospectus filed during the three (3) year period preceding the Effective Date pursuant to Rule 424(b) under the Securities Act, as of its issue date and as of the closing of any sale of securities pursuant thereto, did not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading.

4.7 No Material Adverse Change. Since January 1, 2017, except for the Merger or as identified and described in the SEC Filings, there has not been (i) any change in the consolidated assets, liabilities, financial condition or operating results of the Company or its Subsidiaries from that reflected in the financial statements included in the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, except for changes in the ordinary course of business that have not had a Material Adverse Effect, or (ii) any event or condition that has had a Material Adverse Effect.

4.8 No Conflict, Breach, Violation or Default. The execution, delivery and performance of the Transaction Documents by the Company and the issuance and sale of the Securities will not (i) conflict with or result in a material breach or material violation of (a) any of the terms and provisions of, or constitute a default under, the Company’s Certificate of Incorporation or the Company’s Bylaws, both as in effect as of immediately prior to the Closing, or (b) any Law or Order of any governmental authority (including any court, domestic or foreign), in each case having jurisdiction over the Company, any Subsidiary thereof or any of their respective assets or properties, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any lien, encumbrance or other adverse claim upon any of the properties or assets of the Company or any Subsidiary thereof or give to others any rights of termination, amendment, acceleration or

cancellation (with or without notice, lapse of time or both) of, any Contract; except in the case of clauses (i)(b) and (ii) such as would not have a Material Adverse Effect.

4.9 Tax Matters. The Company and each of its Subsidiaries has timely filed all material tax returns required to have been filed by the Company or such Subsidiary with all appropriate governmental authorities. All such tax returns were correct and complete in all material respects and have been prepared in material compliance with all applicable Laws. The Company and each Subsidiary thereof have paid all material taxes due and owing on or before the Effective Date, except those being contested in good faith with respect to which adequate reserves have been reserved for on the books of the Company.

4.10 Transfer Taxes. There are no transfer taxes or other similar fees or charges under Federal law or the laws of any state, or any political subdivision thereof, required to be paid in connection with the execution and delivery of this Agreement or the issuance by the Company or sale by the Company of the Securities.

4.11 Litigation. There is no claim, action, suit, arbitration or similar proceeding pending against or affecting or, to the Company's Knowledge, threatened against the Company, its Subsidiaries or any of its or their properties or, to the Company's Knowledge, any director or officer of the Company (in his or her capacity as such), in each case that would have a Material Adverse Effect.

4.12 Financial Statements. The financial statements of the Company contained or incorporated by reference in each SEC Filing (i) complied as to form in all material respects with the rules and regulations of the SEC with respect thereto as in effect at the time of filing (or to the extent corrected by a subsequent restatement); (ii) present fairly, in all material respects, the consolidated financial position of the Company and its Subsidiaries as of the dates presented and the results of operations and cash flows for the periods presented; and (iii) were prepared in conformity with United States generally accepted accounting principles applied on a consistent basis (except as may be indicated in the notes to such financial statements or, in the case of unaudited financial statements, as permitted by Form 10-Q of the SEC, and except that the unaudited financial statements may not contain footnotes and are subject to normal and recurring year-end adjustments).

4.13 Intellectual Property. The Company and each of its Subsidiaries owns, possesses, licenses or has other rights to use, or can obtain on commercially reasonable terms, all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, know-how and other intellectual property (collectively, the "Intellectual Property") used in the conduct of the Company's and each of its Subsidiaries' businesses as now conducted or as proposed in the SEC Filings to be conducted (the "Company Intellectual Property"). To the Knowledge of the Company, there are no rights of third parties to any owned Company Intellectual Property, other than as licensed by the Company. To the Knowledge of the Company, there is no infringement by third parties of any owned Company Intellectual Property. There is no pending or, to the Company's Knowledge, threatened action, suit, proceeding or claim by others challenging the Company's rights in or to any Company Intellectual Property. There is no pending or, to the Company's Knowledge, threatened action, suit, proceeding or claim by others challenging the

validity or scope of any owned Company Intellectual Property. There is no pending or, to the Company's Knowledge, threatened action, suit, proceeding or claim by others that the Company infringes or otherwise violates any patent, trademark, copyright, trade secret or other proprietary rights of others. To the Company's Knowledge, there are no material facts required to be disclosed to the U.S. Patent and Trademark Office ("USPTO") which have not been disclosed to the USPTO and which would preclude the grant of a patent in connection with any patent application of the Company Intellectual Property or could form the basis of a finding of invalidity with respect to any issued patents of the Company Intellectual Property.

4.14 Disclosure. The Company understands and confirms that the Investors will rely on the foregoing representations in effecting transactions in securities of the Company. To the Knowledge of the Company, all due diligence materials regarding the Company, its Subsidiaries, their businesses and the transactions contemplated hereby, furnished by or on behalf of the Company or its Subsidiaries to the Investors upon their request are, when taken together with the SEC Filings and the Disclosure Schedule, true and correct in all material respects and do not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

4.15 Contracts. Each franchise, contract or other document of a character required to be described in the SEC Filings or to be filed as an exhibit to the SEC Filings under the Securities Act and the rules and regulations promulgated thereunder (collectively, the "Material Contracts") is so described or filed.

4.16 Compliance. Except as would not, individually or in the aggregate, result in a Material Adverse Effect: (i) the Company and each of its Subsidiaries are and have been for the three (3)-year period preceding the date hereof in compliance with statutes, laws, ordinances, rules and regulations applicable to them for the ownership, testing, development, manufacture, packaging, processing, use, labeling, storage, or disposal of any product manufactured by or on behalf of the Company or its Subsidiaries or out-licensed by the Company or its Subsidiaries (a "Company Product"), including without limitation, the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301, et seq., the Public Health Service Act, 42 U.S.C. § 262, similar laws of other governmental entities and the regulations promulgated pursuant to such laws (collectively, "Applicable Laws"); (ii) the Company and its Subsidiaries possess all material licenses, certificates, approvals, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws and/or for the ownership of their respective properties or the conduct of their respective businesses as it relates to a Company Product and as described in the SEC Filings (collectively, "Authorizations") and such Authorizations are valid and in full force and effect and the Company and its Subsidiaries are not in violation of any material term of any such Authorizations; (iii) neither the Company nor any of its Subsidiaries have received any written notice of adverse finding, warning letter or other written correspondence or notice from the U.S. Food and Drug Administration (the "FDA") or any other governmental entity alleging or asserting noncompliance with any Applicable Laws or Authorizations relating to a Company Product; (iv) neither the Company nor its Subsidiaries have received written notice of any ongoing claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental entity or third party alleging that any Company Product, operation or activity related to a Company Product is in violation of any Applicable Laws or

Authorizations or has any Knowledge that any such governmental entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, nor, to the Company's Knowledge, has there been any noncompliance with or violation of any Applicable Laws by the Company or any of its Subsidiaries that would reasonably be expected to require the issuance of any such written notice or result in an investigation, corrective action, or enforcement action by the FDA or similar governmental entity with respect to a Company Product; (v) neither the Company nor any of its Subsidiaries have received written notice that any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any Authorizations or has any Knowledge that any such governmental entity has threatened or is considering such action with respect to a Company Product; and (vi) the Company and each of its Subsidiaries have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete correct in all material respects and not misleading on the date filed (or were corrected or supplemented by a subsequent submission). To the Company's Knowledge, neither the Company nor any of its Subsidiaries nor any of their respective directors, officers, employees or agents, has made, or caused the making of, any false statements on, or material omissions from, any other records or documentation prepared or maintained to comply with the requirements of the FDA or any other governmental entity.

4.17 Compliance in Clinical Trials. The clinical studies and tests conducted by the Company and each of its Subsidiaries or on behalf of the Company or any of its Subsidiaries, have been and, if still pending, are being conducted in all material respects pursuant to all Applicable Laws and Authorizations; the descriptions of the results of such clinical studies and tests contained in the SEC Filings are accurate and complete in all material respects and fairly present the data derived from such clinical studies and tests; the Company (on a consolidated basis) is not aware of any clinical studies or tests, the results of which the Company (on a consolidated basis) believes reasonably call into question the research, nonclinical or clinical study or test results described or referred to in the SEC Filings when viewed in the context in which such results are described; and neither the Company nor any of its Subsidiaries have received any written notices or correspondence from any governmental entity requiring the termination, suspension or material modification of any clinical study or test conducted by or on behalf of the Company or any of its Subsidiaries.

4.18 Investment Company. The Company (on a consolidated basis with its Subsidiaries) is not and, after giving effect to the offering and sale of the Securities, will not be an "investment company" as defined in the Investment Company Act of 1940, as amended.

4.19 Governmental Permits, Etc. The Company and each of its Subsidiaries possess all material licenses, certificates, permits and other authorizations issued by all applicable authorities necessary to conduct their respective businesses, and the Company and each of its Subsidiaries have not received any written notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business.

4.20 Internal Control over Financial Reporting. The Company (on a consolidated basis) maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company's internal controls over financial reporting are effective 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 and the Company is not aware of any material weakness in its internal controls over financial reporting. The Company maintains "disclosure controls and procedures" (as such term is defined in Rule 13a-15(e) under the Exchange Act); such disclosure controls and procedures are effective.

4.21 Labor. No labor problem or dispute with the employees of the Company or any of its Subsidiaries exists or, to the Knowledge of the Company, is threatened.

4.22 ERISA. None of the following events has occurred or exists: (i) a failure to fulfill the obligations, if any, under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and the regulations and published interpretations thereunder with respect to a Plan that is required to be funded, determined without regard to any waiver of such obligations or extension of any amortization period; (ii) an audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other federal or state governmental agency or any foreign regulatory agency with respect to the employment or compensation of employees by any of the Company that could have a Material Adverse Effect; (iii) any breach of any contractual obligation, or any violation of law or applicable qualification standards, with respect to the employment or compensation of employees by the Company that would reasonably be expected to have a Material Adverse Effect. None of the following events has occurred or is reasonably likely to occur: (i) a material increase in the aggregate amount of contributions required to be made to all Plans in the current fiscal year of the Company compared to the amount of such contributions made in the most recently completed fiscal year of the Company; (ii) a material increase in the "accumulated post-retirement benefit obligations" (within the meaning of Statement of Financial Accounting Standards 106) of the Company compared to the amount of such obligations in the most recently completed fiscal year of the Company; (iii) any event or condition giving rise to a liability under Title IV of ERISA that could have a Material Adverse Effect; or (iv) the filing of a claim by one or more employees or former employees of the Company related to their employment that could have a Material Adverse Effect. For purposes of this paragraph, the term "Plan" means a plan (within the meaning of Section 3(3) of ERISA) subject to Title IV of ERISA with respect to which the Company may have any liability.

4.23 Environmental Laws. The Company and each of its Subsidiaries (i) is in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic

substances or wastes, pollutants or contaminants (“Environmental Laws”), (ii) have received and is in compliance with all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct its business and (iii) have not received notice of any actual or potential liability under any environmental law, except where such non-compliance with Environmental Laws, failure to receive required permits, licenses or other approvals, or liability would not, individually or in the aggregate, have a Material Adverse Effect, whether or not arising from transactions in the ordinary course of business. The Company nor any of its Subsidiaries have been named as a “potentially responsible party” under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.

4.24 Foreign Corrupt Practices. The Company (on a consolidated basis) is not nor, to the Knowledge of the Company, any director, officer, agent, or employee of the Company or any of its Subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the “FCPA”), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any “foreign official” (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA.

4.25 Money Laundering Laws. The operations of the Company and each of its Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements and the money laundering statutes and the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the “Money Laundering Laws”) and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its Subsidiaries with respect to the Money Laundering Laws is pending or, to the Knowledge of the Company, threatened.

4.26 OFAC. Neither the Company nor any of its Subsidiaries are nor, to the Knowledge of the Company, any director, officer, agent or employee of the Company or any of its Subsidiaries (i) is currently subject to any sanctions administered or imposed by the United States (including any administered or enforced by the Office of Foreign Assets Control of the U.S. Treasury Department, the U.S. Department of State, or the Bureau of Industry and Security of the U.S. Department of Commerce), the United Nations Security Council, the European Union, or the United Kingdom (including sanctions administered or controlled by Her Majesty’s Treasury) (collectively, “Sanctions”) and such persons, “Sanction Persons”) or (ii) will, directly or indirectly, use the proceeds of this offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person in any manner that will result in a violation of any economic Sanctions by, or could result in the imposition of Sanctions against, any person (including any person participating in the offering, whether as underwriter, advisor, investor or otherwise). Neither the Company nor any of its Subsidiaries is nor, to the Knowledge of the Company, any director, officer, agent, or employee of the Company or any of its Subsidiaries, is a person that is, or is 50% or more owned or otherwise controlled by a person that is: (i) the subject of any Sanctions; or (ii) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions that broadly prohibit dealings

with that country or territory (currently, Cuba, Iran, North Korea, Sudan, and Syria) (collectively, “Sanctioned Countries” and each, a “Sanctioned Country”). The Company nor any of its Subsidiaries have engaged in any dealings or transactions with or for the benefit of a Sanctioned Person, or with or in a Sanctioned Country, in the preceding 3 years, nor does the Company (on a consolidated basis) have any plans to increase its dealings or transactions with Sanctioned Persons, or with or in Sanctioned Countries.

4.27 Compliance with Listing Requirements. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is listed on the NASDAQ Capital Market (the “NASDAQ Capital Market”). The Company is in compliance with the listing and listing maintenance requirements of the NASDAQ Capital Market applicable to it for the continued trading of its Common Stock on the NASDAQ Capital Market. The Company has not received any notification that the SEC, the NASDAQ Capital Market or the Financial Industry Regulatory Authority, Inc. (“FINRA”) is contemplating terminating the registration of the Common Stock under the Exchange Act or delisting the Common Stock from the NASDAQ Capital Market.

4.28 Reserved.

4.29 No Integrated Offering. Assuming the accuracy of the representations and warranties of the Investors set forth in Section 5, the Company has not, directly or indirectly through any agent, made any offers or sales of, or solicited any offers to buy, any Company “security” (as defined in the Securities Act) under circumstances that would adversely affect reliance by the Company on Section 4(a)(2) for the exemption from registration for the transactions contemplated hereby or would require registration of any of the Securities under the Securities Act.

4.30 Private Placement. Assuming the accuracy of the representations and warranties of the Investors set forth in Section 5, and in reliance thereon, the offer and sale of the Securities to the Investors as contemplated hereby is exempt from the registration requirements of the Securities Act.

4.31 Shell Company. The Company is not, and was not in the past, an “ineligible issuer” (as defined in Rule 405 promulgated under the Securities Act).

4.32 Use of Form S-3. The Company meets the registration and transaction requirements for use of Form S-3 for the registration of the resale of the Shares and the Warrant Shares by the Investors, subject to the SEC’s guidance and interpretations regarding secondary offerings being considered primary offerings.

4.33 No Stop Order; Shares Approved for Listing. No stop order or suspension of trading has been imposed as of the Effective Date by the NASDAQ Capital Market, the SEC or any other governmental authority or regulatory body with respect to public trading in the Common Stock. The NASDAQ Capital Market has approved the listing of the Shares and the Warrant Shares.

4.34 Sarbanes-Oxley Act. There is and has been no failure on the part of the Company and any of the Company’s directors or officers (in their capacities as such) to comply

with any applicable provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith, including, without limitation, Section 402 relating to loans.

4.35 Consummation of Merger. The Reverse Split has been effected and the Effective Time of the Merger has occurred.

5. REPRESENTATIONS AND WARRANTIES OF THE INVESTORS. EACH INVESTOR HEREBY SEVERALLY, AND NOT JOINTLY, REPRESENTS AND WARRANTS TO THE COMPANY THAT, AS OF THE EFFECTIVE DATE:

5.1 Organization and Existence. Such Investor is a duly organized, validly existing corporation, limited partnership or limited liability company and in good standing under the Laws of the jurisdiction of its organization.

5.2 Authorization. Such Investor has the requisite corporate (or similar) power and authority and has taken all requisite action on the part of such Investor, its officers, directors, members and stockholders necessary for (i) the authorization, execution and delivery of the Transaction Documents to which such Investor is a party and (ii) the authorization of the performance of all obligations of the Investor hereunder or thereunder. The Transaction Documents to which such Investor is a party constitute the legal, valid and binding obligations of the Investor, enforceable against such Investor in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar Laws of general applicability, relating to or affecting creditors' rights generally and to general equitable principles.

5.3 No Conflict, Breach, Violation or Default. The execution, delivery and performance of the Transaction Documents by such Investor will not (i) conflict with or result in a material breach or material violation of (a) any of the terms and provisions of, or constitute a material default under, its organizational documents, as in effect as of immediately prior to the Closing, or (b) any Law or Order of any governmental agency or body or any court, domestic or foreign, in each case having jurisdiction over such Investor or any of its assets or properties, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any lien, encumbrance or other adverse claim upon any of the properties or assets of such Investor or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any material agreement, indenture or instrument to which such Investor is a party; except in the case of clauses (i)(b) and (ii) such as would not have a material adverse effect on the ability of such Investor to perform its obligations hereunder.

5.4 Purchase Entirely for Own Account. The Securities to be received by such Investor hereunder, including the Warrant Shares upon exercise of the Warrants, will be acquired for such Investor's own account, not as nominee or agent, and not with a view to the resale or distribution of any part thereof in violation of the Securities Act, and such Investor has no present agreement, understanding or intention of selling, granting any participation in, or otherwise distributing the same in violation of the Securities Act without prejudice, subject, however, to such Investor's right at all times to sell or otherwise dispose of all or any part of such Securities in compliance with applicable federal and state securities Laws.

5.5 Investment Experience. Such Investor acknowledges that it can bear the economic risk and complete loss of its investment in the Securities and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment contemplated hereby.

5.6 Disclosure of Information. Such Investor has had an opportunity to review all information related to the Company requested by it and to ask questions of and receive answers from the Company regarding the Company, its business and the terms and conditions of the offering of the Securities. Such Investor acknowledges that copies of the SEC Filings have been made available to it, including, without limitation, copies of the definitive proxy statement filed by the Company on [●], 2017 and the Merger Agreement. Such Investor has sought such accounting, legal and tax advice as it has considered necessary to make an informed decision with respect to its acquisition of the Securities.

5.7 Restricted Securities. Such Investor understands that the Securities are characterized as “restricted securities” under the U.S. federal securities Laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such Laws the Securities may be resold without registration under the Securities Act only in certain limited circumstances. Such Investor understands that except as provided in the Registration Rights Agreement: (i) the Securities have not been and are not being registered under the Securities Act or any state securities Laws, and may not be offered for sale, sold, assigned or transferred unless (a) subsequently registered thereunder, (b) such Investor shall have delivered to the Company an opinion of counsel, in a form reasonably acceptable to the Company, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (c) such Investor provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A promulgated under the Securities Act, as amended, (or a successor rule thereto) (collectively, “Rule 144”); (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the Securities Act) may require compliance with some other exemption under the Securities Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other Person is under any obligation to register the Securities under the Securities Act or any state securities Laws or to comply with the terms and conditions of any exemption thereunder.

5.8 Investor Status. At the time such Investor was offered the Securities, it was, and at the Effective Date it is, and on each date on which it exercises the Warrants it will be, an “accredited investor” as defined in Rule 501(a) under the Securities Act. Such Investor is not a registered broker-dealer registered under Section 15(a) of the Exchange Act, or a member of FINRA or an entity engaged in the business of being a broker-dealer. Such Investor is not affiliated with any broker-dealer registered under Section 15(a) of the Exchange Act, or a member of FINRA or an entity engaged in the business of being a broker-dealer.

5.9 Reliance on Exemptions. Such Investor understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements

of federal and state securities Laws and that the Company is relying in part upon the truth and accuracy of, and such Investor's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Investor set forth in the Transaction Documents in order to determine the availability of such exemptions and the eligibility of such Investor to acquire the Securities.

5.10 No General Solicitation. Such Investor did not learn of the investment in the Securities as a result of any general solicitation or general advertising.

5.11 Brokers and Finders. No Person will have, as a result of the transactions contemplated by the Transaction Documents, any valid right, interest or claim against or upon the Company, any Subsidiary thereof or any Investor for any commission, fee or other compensation pursuant to any agreement, arrangement or understanding entered into by or on behalf of such Investor.

5.12 Prohibited Transactions. Since the earlier of (i) such time as such Investor was first contacted by the Company or any other Person acting on behalf of the Company regarding the transactions contemplated hereby or (ii) thirty (30) days prior to the Effective Date, neither such Investor nor any Affiliate of such Investor which (a) had knowledge of the transactions contemplated hereby, (b) has or shares discretion relating to such Investor's investments or trading or information concerning such Investor's investments, including in respect of the Securities, or (c) is subject to such Investor's review or input concerning such Affiliate's investments or trading has, directly or indirectly, effected or agreed to effect any short sale, whether or not against the box, established any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) with respect to the Common Stock, granted any other right (including, without limitation, any put or call option) with respect to the Common Stock or with respect to any security that includes, relates to or derived any significant part of its value from the Common Stock or otherwise sought to hedge its position in the Shares. Such Investor acknowledges that the representations, warranties and covenants contained in this Section 5.12 are being made for the benefit of the Investors as well as the Company and that each of the other Investors shall have an independent right to assert any claims against such Investor arising out of any breach or violation of the provisions of this Section 5.12.

5.13 Rule 506(d) Representation. Such Investor represents that it is not a person of the type described in Section 506(d) of Regulation D under the Securities Act that would disqualify the Company from engaging in a transaction pursuant to Section 506 of Regulation D under the Securities Act.

5.14 Residency. Such Investor is a resident of that jurisdiction specified on such Investor's signature page hereto.

6. CONDITIONS TO CLOSING.

6.1 Conditions to the Investors' Obligations. The obligation of each Investor to purchase the Shares at the Closing is subject to the fulfillment to satisfaction, on or prior to the Closing Date, of the following conditions, any of which may be waived by such Investor (as to itself only):

(a) The representations and warranties made by the Company in Section 4 hereof shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of such earlier date. The Company shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the Closing Date.

(b) No judgment, writ, order, injunction, award or decree of or by any court, or judge, justice or magistrate, including any bankruptcy court or judge, in each case having authority over the Company or its Subsidiaries, or any order of or by any applicable governmental authority, shall have been issued, and no action or proceeding shall have been instituted by any governmental authority, enjoining or preventing the consummation of the transactions contemplated hereby or in the other Transaction Documents.

(c) The Company shall have delivered resolutions of the Board of Directors certified by the Company's Corporate Secretary or evidence of other corporate action by the Company and reasonably acceptable to the Investor effecting the appointing or election of David Hirsch, M.D., Ph.D. to the Company's Board of Directors effective upon the Closing.

(d) The Company shall have delivered a Certificate, executed on behalf of the Company by its Chief Executive Officer or its Chief Financial Officer, dated as of the Closing Date, certifying to the fulfillment of the conditions specified in subsections (a) and (b), of this Section 6.1.

(e) The Investors shall have received an opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C., special counsel to the Company, dated as of the Closing Date, in form and substance reasonably acceptable to the Investors.

(f) The Company shall have executed and delivered the Transaction Documents to each Investor.

(g) No stop order or suspension of trading shall have been imposed or threatened in writing by the NASDAQ Capital Market, the SEC or any other governmental or regulatory body with respect to public trading in the Common Stock. The NASDAQ Capital Market shall have approved the listing of the Shares.

6.2 Conditions to the Company's Obligations. The Company's obligation to sell and issue the Shares at the Closing to each Investor is subject to the fulfillment on or prior to the Closing Date of the following conditions, any of which may be waived by the Company:

(a) The representations and warranties made by such Investor in Section 5 hereof shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date hereof as of the Closing Date, except to the extent any such representation or warranty expressly speaks as of an earlier date, in which case such representation or warranty shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of such earlier date. Each Investor shall have performed in all material respects all obligations and covenants herein required to be performed by it on or prior to the Closing Date.

(b) Each Investor shall have delivered its applicable portion of the Purchase Price to the Company.

(c) Each Investor shall have executed and delivered the Transaction Documents to the Company.

6.3 Termination of Obligations to Effect Closing; Effects.

(a) The obligations of the Company, on the one hand, and the Investors, on the other hand, to effect the Closing shall terminate as follows:

(i) *Upon the mutual written consent of the Company and the Investors;*

(ii) *By the Company if any of the conditions set forth in Section 6.2 shall have become incapable of fulfillment, and shall not have been waived by the Company;*

(iii) *By an Investor (with respect to itself only) if any of the conditions set forth in Section 6.1 shall have become incapable of fulfillment, and shall not have been waived by such Investor; or*

(iv) *By either the Company or any Investor (with respect to itself only) if the Closing has not occurred prior to 11:59 PM (New York time) on [•], 2017;*

provided, however, that, except in the case of clause (i) above, the party seeking to terminate its obligation to effect the Closing shall not then be in breach of any of its representations, warranties, covenants or agreements contained in this Agreement or the other Transaction Documents if such breach has resulted in the circumstances giving rise to such party's seeking to terminate its obligation to effect the Closing.

(b) In the event of termination by the Company or any Investor of its obligations to effect the Closing pursuant to this Section 6.3, written notice thereof shall

forthwith be given to the other Investors by the Company and the other Investors shall have the right to terminate their obligations to effect the Closing upon written notice to the Company and the other Investors. Nothing in this Section 6.3 shall be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or the other Transaction Documents or to impair the right of any party to compel specific performance by any other party of its obligations under this Agreement or the other Transaction Documents.

7. OTHER COVENANTS AND AGREEMENTS OF THE PARTIES .

7.1 Disclosure of Material Non-Public Information. The Company shall not disclose material non-public information to the Investors, or to advisors to or representatives of the Investors, unless prior to disclosure of such information the Company identifies such information as being material non-public information and provides the Investors, such advisors and representatives with the opportunity to accept or refuse to accept such material non-public information for review and any Investor wishing to obtain such information enters into an appropriate confidentiality agreement with the Company with respect thereto.

7.2 Listing of Registrable Securities. The Company shall promptly secure and maintain the listing of all of the Registrable Securities (as defined in the Registration Rights Agreement) pursuant to the terms set forth in the Registration Rights Agreement.

7.3 Legends. The Securities shall bear the following legends:

(a) “The securities represented hereby have not been registered with the Securities and Exchange Commission or the securities commission of any state in reliance upon an exemption from registration under the Securities Act of 1933, as amended, and, accordingly, may not be transferred unless (i) such securities have been registered for sale pursuant to the Securities Act of 1933, as amended, (ii) such securities may be sold pursuant to Rule 144, or (iii) the Company has received an opinion of counsel reasonably satisfactory to it that such transfer may lawfully be made without registration under the Securities Act of 1933, as amended.”

(b) If required by the authorities of any state in connection with the issuance of sale of the Securities, the legend required by such state authority.

7.4 Removal of Legends.

(a) In connection with any sale, assignment, transfer or other disposition of the Securities by an Investor pursuant to Rule 144 or pursuant to any other exemption under the Securities Act such that the purchaser acquires freely tradable securities and upon compliance by such Investor with the requirements of this Agreement, if requested by such Investor, the Company shall cause the Transfer Agent to timely remove any restrictive legends related to the book entry account holding such Securities and make a new, unlegended entry for such book entry Securities sold or disposed of without restrictive legends, provided that the Company has received from the Investor customary representations and other documentation reasonably acceptable to the Company in connection therewith.

(b) Subject to receipt from the Investor by the Company and the Transfer Agent of customary representations and other customary documentation reasonably acceptable to the Company and the Transfer Agent in connection therewith, upon the earliest of (i) the Securities being subject to an effective registration statement covering the resale of the Securities, (ii) such time as the Securities have been sold pursuant to Rule 144, or (iii) such time as the Securities are eligible for resale under Rule 144(b)(1) or any successor provision, the Company shall (A) deliver to the Transfer Agent irrevocable instructions that the Transfer Agent shall make a new, unlegended entry for such book entry Securities, together with either (1) a customary representation by the Investor that Rule 144 applies to the Securities represented thereby or (2) a statement by the Investor that such Investor has sold the Securities represented thereby in accordance with the plan of distribution contained in the Registration Statement, and (B) cause its counsel to deliver to the Transfer Agent one or more opinions to the effect that the removal of such legends in such circumstances may be effected under the Securities Act if required by the Transfer Agent to effect the removal of the legend in accordance with the provisions of this Agreement. The Company agrees that following such time as such legend is no longer required under this Section 7.4, it will, upon an Investor's written request and compliance with the immediately preceding sentence, deliver or cause to be delivered to such Investor, a certificate representing that such Securities are free from all restrictive and other legends. Securities subject to legend removal hereunder shall be transmitted by the Transfer Agent to the Investor by crediting the account of the Investor's custodian as directed by such Investor.

7.5 Furnishing of Information. In order to enable the Investors to sell the Securities under Rule 144, until the date that the Shares and the Warrant Shares cease to be Registrable Securities (as defined in the Registration Rights Agreement), the Company shall use its commercially reasonable efforts to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the Effective Date pursuant to the Exchange Act. During such period, if the Company is not required to file reports pursuant to the Exchange Act, it will prepare and furnish to the Investors and make publicly available in accordance with Rule 144(c) such information as is required for the Investors to sell the Securities under Rule 144.

7.6 Indemnification of Investors. Subject to the provisions of this Section 7.6, the Company will indemnify and hold each Investor harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation, that any such Investor may suffer or incur as a result of or relating to any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement; provided, however, that the aggregate liability of the Company to each Investor under this Section 7.6 shall not exceed the amount paid by such Investor to the Company pursuant to Section 3. Promptly after receipt by any Investor (the "Indemnified Person") of notice of any demand or claim from any Person that would or might give rise to a claim or the commencement of any action, proceeding or investigation in respect of which indemnification may be sought pursuant to this Section 7.6 (a "Third Party Claim"), such Indemnified Person shall promptly notify the Company in writing, and in reasonable detail, of such Third Party Claim. Thereafter, the Indemnified Person will deliver to the Company, within five (5) Business Days after the Indemnified Person's receipt thereof, copies of all notices and documents (including court

papers) received by the Indemnified Person relating to the Third Party Claim. If a Third Party Claim is made against the Company, the Company will be entitled to participate in the defense thereof and, if it so chooses, to assume the defense thereof (subject to a reservation of rights) with counsel selected by the Company by giving the Indemnified Person notice within twenty (20) days of the Company's receipt of notice of the Third Party Claim pursuant to this Section 7.6. If the Company does not give such notice to the Indemnified Person of the Company's intent to assume the defense of the Third Party Claim, the Indemnified Person shall be entitled to assume the defense thereof. Should the Company so elect to assume the defense of a Third Party Claim, the Company will not be liable to the Indemnified Person for legal expenses subsequently incurred by the Indemnified Person in connection with the defense thereof. If the Company assumes such defense, the Indemnified Person will have the right to participate in the defense thereof and to employ counsel, at its own expense, separate from the counsel employed by the Company, it being understood, however, that the Company will control such defense. If the Company chooses to defend any Third Party Claim, then all the Parties will cooperate in the defense or prosecution of such Third Party Claim. The Indemnified Person will not admit any liability with respect to, or settle, compromise or discharge, any Third Party Claim without the prior written consent of the Company. Notwithstanding any other provision of this Agreement, the Company shall not enter into settlement of any Third Party Claim without the prior written consent of the Indemnified Person (which consent shall not be unreasonably withheld), unless such settlement requires only the payment of money that the Company is obligated to pay.

7.7 Equal Treatment of Investors. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration is also offered to all of the Parties to the Transaction Documents. For clarification purposes, this provision constitutes a separate right granted to each Investor by the Company and negotiated separately by each Investor, and is intended for the Company to treat the Investors as a class and shall not in any way be construed as the Investors acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

7.8 Compliance with Laws. Notwithstanding any other provision of this Agreement, each Investor covenants that the Securities may be disposed of only pursuant to an effective registration statement under, and in compliance with the requirements of, the Securities Act, or pursuant to an available exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, and in compliance with any applicable state and federal securities Laws. In connection with any transfer of the Securities other than (i) pursuant to an effective registration statement, (ii) to the Company, (iii) pursuant to Rule 144 (provided that the Investor provides the Company with reasonable assurances (in the form of seller and, if applicable, broker representation letters) that the Securities may be sold pursuant to such rule), or (iv) to its Affiliates, the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act. As a condition of transfer, any such transferee shall agree in writing to be bound by the terms of this Agreement and shall have the rights of an Investor under this Agreement with respect to such transferred Securities.

7.9 Termination of Certain Obligations. The provisions of Sections 7.1 and 7.2 shall terminate and be of no further force and effect on the date on which the Company's obligations under the Registration Rights Agreement to register or maintain the effectiveness of any registration covering the Registrable Securities (as defined in the Registration Rights Agreement) shall terminate.

8. **SURVIVAL**. **THE REPRESENTATIONS, WARRANTIES, COVENANTS AND AGREEMENTS CONTAINED IN THIS AGREEMENT SHALL SURVIVE FOR A PERIOD OF ONE (1) YEAR FOLLOWING THE CLOSING.**

9. **MISCELLANEOUS**.

9.1 Assignment. This Agreement may not be assigned by a party hereto without the prior written consent of the Company or the Investors, as applicable.

9.2 Successors. This Agreement shall be binding solely on, and inure solely to the benefit of, each of the undersigned and their respective successors and permitted assigns, and nothing set forth in this Agreement shall be construed to confer upon or give to any Person other than each of the undersigned and their respective successors and permitted assigns any benefits, rights or remedies under or by reason of, or any rights to enforce or cause the Company to enforce, the equity commitment or any provisions of this Agreement.

9.3 Counterparts; Faxes; Electronic Mail. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed via facsimile or electronic mail, each of which shall be deemed an original.

9.4 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

9.5 Notices. Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given as hereinafter described (i) if given by personal delivery, then such notice shall be deemed given upon such delivery; (ii) if given by facsimile, then such notice shall be deemed given upon receipt of confirmation of complete transmittal; (iii) if given by mail, then such notice shall be deemed given upon the earlier of (A) receipt of such notice by the recipient or (B) three (3) days after such notice is deposited in first class mail, postage prepaid; and (iv) if given by an internationally recognized overnight air courier, then such notice shall be deemed given one (1) Business Day after delivery to such carrier. All notices shall be addressed to the party to be notified at the address as follows, or at such other address as such party may designate by ten (10) days' advance written notice to the other party:

If to the Company:

Molecular Templates, Inc.
9301 Amberglen Boulevard, Suite 100
Austin, TX 78729
Attn: [●]

With a copy to:

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111
Attn: William C. Hicks
Matthew J. Gardella

If to the Investors:

to the addresses set forth on the signature pages hereto.

9.6 Expenses. The Parties shall pay their own costs and expenses in connection herewith; provided, however, following the Closing, the Company shall pay the reasonable fees and expenses of Longitude Venture Partners III, L.P., including its reasonable attorney's fees and costs, up to a maximum aggregate amount of \$175,000. In the event that legal proceedings are commenced by any party to this Agreement against another party to this Agreement in connection with any Transaction Document, the party or parties to such proceeding which do not prevail in such proceedings shall severally, but not jointly, pay their pro rata share of the reasonable attorneys' fees and other reasonable out-of-pocket costs and expenses incurred by the prevailing party in such proceedings.

9.7 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Required Investors. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each holder of any Securities purchased under this Agreement at the time outstanding, each future holder of all such Securities, and the Company.

9.8 Publicity. Except as set forth below, no public release or announcement concerning the transactions contemplated hereby shall be issued by the Company or the Investors without the prior written consent of the Company (in the case of a release or announcement by the Investors) or the Required Investors (in the case of a release or announcement by the Company) (which consents shall not be unreasonably withheld), except (i) as such release or announcement may be required by Law or the applicable rules or regulations of the SEC, any securities exchange or securities market, in which case the Company or the Investors, as the case may be, shall allow the Investors or the Company, as applicable, to the extent reasonably practicable in the circumstances, reasonable time to comment on such release or announcement in advance of such issuance or (ii) a public release or announcement in connection with discussions to investors not including the Required Investors, in which case such consent shall not be required. Notwithstanding the foregoing, no Investor may be named in a public release or announcement concerning the transactions contemplated hereby without such Investor's prior written consent. The Investors hereby acknowledge and agree that no later than the fourth (4th) Business Day after the Effective Date, the Company shall (x) issue a press release reasonably acceptable to the Required Investors and (y) file a Current Report on Form 8-K describing the terms of the transactions contemplated by the Transaction Documents in the form required by the Exchange Act and attaching the material Transaction Documents (including, without limitation, this Agreement (and all schedules and exhibits to this Agreement), the form of Warrant and the Registration Rights Agreement, as exhibits to such filing (including all attachments)). In addition, the Company will make such other filings and notices in the manner and time required by the SEC or the NASDAQ Capital Market, the Warrants and the Registration Rights Agreement.

9.9 Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable Law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable Law, the Parties hereby waive any provision of Law which renders any provision hereof prohibited or unenforceable in any respect.

9.10 Entire Agreement. This Agreement, including the Exhibits and the Disclosure Schedule, the Warrants and the Registration Rights Agreement constitute the entire agreement among the Parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, both oral and written, among the Parties with respect to the subject matter hereof and thereof.

9.11 Further Assurances. The Parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained.

9.12 Governing Law; Consent to Jurisdiction; Waiver of Jury Trial. This Agreement shall be governed by, and construed in accordance with, the internal Laws of the State of Delaware without regard to the choice of law principles thereof. Each of the Parties

irrevocably submits to the exclusive jurisdiction of the courts of the Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware (or, if the Delaware Court of Chancery declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware) for the purpose of any suit, action, proceeding or judgment relating to or arising out of this Agreement and the transactions contemplated hereby. Service of process in connection with any such suit, action or proceeding may be served on each party hereto anywhere in the world by the same methods as are specified for the giving of notices under this Agreement. Each of the Parties irrevocably consents to the jurisdiction of any such court in any such suit, action or proceeding and to the laying of venue in such court. Each party hereto irrevocably waives any objection to the laying of venue of any such suit, action or proceeding brought in such courts and irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. EACH OF THE PARTIES WAIVES ANY RIGHT TO REQUEST A TRIAL BY JURY IN ANY LITIGATION WITH RESPECT TO THIS AGREEMENT AND REPRESENTS THAT COUNSEL HAS BEEN CONSULTED SPECIFICALLY AS TO THIS WAIVER.

9.13 Disclaimer. Except as expressly set forth in this Agreement, no Party makes any representation or warranty to any other Party of any nature, express or implied. Each Investor acknowledges and agrees that in evaluating its investment in the Securities, it is not relying on any representations, warranties or information (including the accuracy or completeness thereof) other than the representations and warranties contained herein and the information contained in the SEC Filings.

9.14 Independent Nature of Investors' Obligations and Rights. The obligations of each Investor under any Transaction Document are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under any Transaction Document. The decision of each Investor to purchase Securities pursuant to the Transaction Documents has been made by such Investor independently of any other Investor. Nothing contained in any Transaction Document, and no action taken by any Investor pursuant thereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Investor acknowledges that no other Investor has acted as agent for such Investor in connection with making its investment hereunder and that no Investor will be acting as agent of such Investor in connection with monitoring its investment in the Securities or enforcing its rights under the Transaction Documents. Each Investor shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of the Transaction Documents, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose. The Company acknowledges that each of the Investors has been provided with the same Transaction Documents for the purpose of closing a transaction with multiple Investors and not because it was required or requested to do so by any Investor.

[*Signature pages follow*]

IN WITNESS WHEREOF, the Parties have executed this Securities Purchase Agreement as of the Effective Date.

The Company:

Molecular Templates, Inc.

By: _____
Name:
Title:

IN WITNESS WHEREOF, the Parties have executed this Securities Purchase Agreement as of the Effective Date.

NAME OF INVESTOR: _____

By: _____

Name:

Title:

Aggregate Purchase Price (Subscription Amount):

\$ _____

Number of Shares to be Acquired: _____

Underlying Shares Subject to Warrant: _____

(50% of the number of Shares to be acquired)

Tax ID No.: _____

Address for Notice/Residency of Investor:

Telephone No.: _____

Facsimile No.: _____

E-mail Address: _____

Attention: _____

Delivery Instructions:
(if different than above)

c/o _____

Street: _____

City/State/Zip: _____

Attention: _____

Telephone No.: _____

FORM OF
REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (the “Agreement”) is made and entered into as of [●], 2017 by and among Molecular Templates, Inc. (which name, prior to the closing of the Merger, was Threshold Pharmaceuticals, Inc.), a Delaware corporation (the “Company”), and the “Investors” named in that certain Securities Purchase Agreement by and among the Company and the Investors of even date herewith (the “Purchase Agreement”). The Company and the Investors may each be referred to herein individually as a “Party” and collectively as the “Parties.” This Agreement is made pursuant to the Purchase Agreement and shall be effective as of the Closing. Capitalized terms used herein have the respective meanings ascribed thereto in the Purchase Agreement unless otherwise defined herein.

The Parties hereby agree as follows:

CERTAIN DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings:

“Business Day” means any day, other than Saturday or Sunday, on which banks in New York City are open for the general transaction of business.

“Common Stock” means the Company’s common stock, par value \$0.001 per share, and any securities into which such shares may hereinafter be reclassified.

“Closing” shall have the meaning provided for in the Purchase Agreement.

“Eligible Market” means any of The New York Stock Exchange, Inc., The NYSE MKT, The NASDAQ Global Select Market, The NASDAQ Global Market or The NASDAQ Capital Market.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

“Initial Registration Statement” means the initial Registration Statement filed pursuant to Section 2(a) of this Agreement.

“Investors” means the Investors identified in the Purchase Agreement and any Affiliate, successor or assign, or permitted transferee of any Investor who is a subsequent holder of any Registrable Securities.

“Merger Agreement” means that certain Agreement and Plan of Merger and Reorganization, dated as of March [●], 2017, by and among Molecular Templates, Inc., Threshold Pharmaceuticals, Inc., a Delaware corporation (“Threshold”), and Trojan Merger Sub, Inc., a Delaware corporation.

“Prospectus” means (i) the prospectus included in any Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus, and (ii) any “free writing prospectus” as defined in Rule 405 under the Securities Act.

“Register,” “registered” and “registration” refer to a registration made by preparing and filing a Registration Statement or similar document in compliance with the Securities Act (as defined below), and the declaration or ordering of effectiveness of such Registration Statement or document.

“Registrable Securities” means (i) the Shares, (ii) the Warrant Shares and (iii) any other securities issued or issuable with respect to or in exchange for Registrable Securities, whether by merger, charter amendment, stock split, dividend, recapitalization, or otherwise; provided, that, a security shall cease to be a Registrable Security upon (A) the sale of such security pursuant to a Registration Statement or Rule 144 under the Securities Act, or (B) such security becoming eligible for sale without restriction by the applicable Investor pursuant to Rule 144.

“Registration Statements” means any one or more registration statements of the Company filed under the Securities Act that covers the resale of any of the Registrable Securities pursuant to the provisions of this Agreement (including, without limitation, the Initial Registration Statement and any Remainder Registration Statements), including (in each case) amendments and supplements to such Registration Statements, including post-effective amendments, all exhibits and all material incorporated by reference in such Registration Statements.

“Remainder Registration Statements” has the meaning set forth in Section 2(c).

“Required Investors” means the Investors holding a majority of the Registrable Securities.

“Rule 144” means Rule 144 promulgated by the SEC pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same effect as such Rule.

“Rule 415” means Rule 415 promulgated by the SEC pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same effect as such Rule.

“SEC” means the U.S. Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

“Shares” means the aggregate number of shares of Common Stock issued pursuant to the Purchase Agreement.

“Trading Day” means (a) any day on which the Common Stock is listed or quoted and traded on its primary Trading Market, or (b) if the Common Stock is not then listed or quoted and traded on its primary Trading Market, then a day on which trading of the Common Stock occurs on an Eligible Market, or (c) if the Common Stock is not listed or quoted as set forth in clauses (a) or (b) hereof, any Business Day.

“Trading Market” means The New York Stock Exchange, Inc., The NYSE MKT, The NASDAQ Global Select Market, The NASDAQ Global Market, The NASDAQ Capital Market or any other Eligible Market, or any national securities exchange, market or trading or quotation facility on which the Common Stock is then listed or quoted.

“Warrants” means the Warrants issued pursuant to the Purchase Agreement.

“Warrant Shares” means the shares of Common Stock issued or issuable upon exercise of the Warrants.

REGISTRATION.

Registration Statements.

Initial Registration Statement. Promptly following the date of closing of the purchase and sale of the securities contemplated by the Purchase Agreement (the “Closing Date”), but no later than sixty (60) days after the Closing Date (the “Filing Deadline”), the Company shall file with the SEC, to include (by way of filing, amendment or otherwise) the Registrable Securities sold in connection with the Purchase Agreement, the Initial Registration Statement, so as to cover the resale of the Registrable Securities. The Initial Registration Statement shall be on Form S-3 (except if the Company is then ineligible to register for resale the Registrable Securities on Form S-3, in which case such registration shall be on such other form available to register for resale the Registrable Securities as a secondary offering) subject to the provisions of Section 2(a)(ii). Subject to any SEC comments, such Registration Statement shall include the plan of distribution in substantially the form attached hereto as Exhibit A; provided, however, that no Investor shall be named as an “underwriter” in the Registration Statement without the Investor’s prior written consent. Unless such Registration Statement includes 100% of the Registrable Securities then outstanding, such Registration Statement shall not include any shares of Common Stock or other securities for the account of any other holder without the prior written consent of the Required Investors. The Registration Statement (and each amendment or supplement thereto, and each request for acceleration of effectiveness thereof) shall be provided in accordance with Section 3(c) to the Investors and their counsel prior to its filing or other submission.

Alternative Form of Registration Statement. In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on another appropriate form reasonably acceptable to the Investors and (ii) undertake to register the Registrable Securities on Form S-3 promptly after such form is available, provided that the Company shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the SEC.

Expenses. The Company will pay all reasonable expenses associated with effecting the registration of the Registrable Securities pursuant to this Section 2, including filing and printing fees, the Company's counsel and accounting fees and expenses, costs associated with clearing the Registrable Securities for sale under applicable state securities laws, listing fees, and reasonable fees and expenses of one counsel to the Investors up to an aggregate cap of Thirty-five Thousand Dollars (\$35,000), but excluding discounts, commissions, fees of underwriters, selling brokers, dealer managers or similar securities industry professionals with respect to the Registrable Securities being sold.

Effectiveness.

The Company shall use commercially reasonable efforts to have each Registration Statement declared effective as soon as practicable after filing, and in any event no later than one hundred twenty (120) days after the Closing (the "Effectiveness Deadline"). The Company shall notify the Investors by facsimile or e-mail as promptly as practicable, and in any event, within twenty-four (24) hours, after any Registration Statement is declared effective and shall simultaneously provide the Investors with copies of any related Prospectus to be used in connection with the sale or other disposition of the securities covered thereby.

For not more than thirty (30) consecutive days or for a total of not more than sixty (60) days in any twelve (12) month period, the Company may suspend the use of any Prospectus included in any Registration Statement contemplated by this Section in the event that the Company determines in good faith that such suspension is necessary to (A) delay the disclosure of material non-public information concerning the Company, the disclosure of which at the time is not, in the good faith opinion of the Company, in the best interests of the Company or (B) amend or supplement the affected Registration Statement or the related Prospectus so that such Registration Statement or Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the case of the Prospectus in light of the circumstances under which they were made, not misleading (an "Allowed Delay"); provided, that the Company shall promptly (a) notify each Investor in writing of the commencement of an Allowed Delay, but shall not (without the prior written consent of an Investor) disclose to such Investor any material non-public information giving rise to an Allowed Delay and (b) advise the Investors in writing to cease all sales under the Registration Statement until the end of the Allowed Delay.

Rule 415; Cutback. If at any time the SEC informs the Company that all of the Registrable Securities cannot, based on the provisions of Rule 415 under the Securities Act, be registered for resale as a secondary offering on a single registration statement, or requires any Investor to be named as an "underwriter," the Company shall use its commercially reasonable efforts to persuade the SEC that the offering contemplated by the Registration Statement is a valid secondary offering and not an offering "by or on behalf of the issuer" as defined in Rule 415 and that none of the Investors is an "underwriter." In the event that, despite the Company's commercially reasonable efforts and compliance with the terms of this Section 2(c), the SEC refuses to alter its position, the Company shall (i) remove from the Registration Statement such portion of the Registrable Securities (the "Cut Back Shares") and/or (ii) agree to such restrictions and limitations on the registration and resale of the Registrable Securities as the SEC may require to assure the Company's compliance with the requirements of Rule 415 (collectively, the

“ SEC Restrictions ”); provided, however, that the Company shall not agree to name any Investor as an “underwriter” in such Registration Statement without the prior written consent of such Investor. Any cut-back imposed on the Investors pursuant to this Section 2(c) shall be allocated among the Investors on a pro rata basis and, unless otherwise directed in writing by an Investor as to its Registrable Securities, the number of Registrable Securities to be registered on such Registration Statement will first be reduced first by the Warrant Shares (applied, in the case that some Warrant Shares may be registered, to the Investors on a pro rata basis based on the total number of unregistered Warrant Shares held by such Investors) and second by the Shares (applied, in the case that some Shares may be registered, to the Investors on a pro rata basis based on the total number of unregistered Shares held by such Investors), in each case subject to a determination by the SEC that certain Investors must be reduced first based on the number of Registrable Securities held by such Investors. For the avoidance of doubt, for purposes of this Section 2(c), the term “commercially reasonable efforts” shall not require the Company to institute or maintain any action, suit or proceeding against the SEC or any member of the Staff of the SEC. In the event the Company amends the Initial Registration Statement or files a new Initial Registration Statement, as the case may be, to remove the Cut Back Shares, the Company will use its commercially reasonable efforts to file with the SEC, as promptly as allowed by SEC, one or more registration statements on Form S-3 or such other form available to register for resale those Registrable Securities that were not registered for resale on the Initial Registration Statement, as amended, or the new Registration Statement (the “ Remainder Registration Statements ”).

If: (i) the Initial Registration Statement is not filed with the SEC on or prior to the Filing Deadline, (ii) the Initial Registration Statement is not declared effective by the SEC (or otherwise does not become effective) for any reason on or prior to the Effectiveness Deadline or (iii) after its Effective Date, except in the case of an Excluded Event (as defined in Section 2(e)), (A) such Registration Statement ceases for any reason (including without limitation by reason of a stop order, or the Company’s failure to update the Registration Statement) to remain continuously effective as to all Registrable Securities included in such Registration Statement or (B) the Investors are not permitted to utilize the Prospectus therein to resell such Registrable Securities for any reason (other than due to a change in the “Plan of Distribution” or the inaccuracy of any information regarding the Investors), in each case, for more than an aggregate of twenty (20) consecutive Trading Days or forty-five (45) Trading Days (which need not be consecutive days) during any twelve (12) month period (other than as a result of a breach of this Agreement by an Investor), or (iv) if none of the Initial Registration Statement or a Remainder Registration Statement is effective and the Company fails to satisfy the current public information requirement pursuant to Rule 144(c)(1) as a result of which the Investors who are not affiliates are unable to sell Registrable Securities without restriction under Rule 144 (or any successor thereto), (any such failure or breach in clauses (i) through (iv) above being referred to as an “ Event,” and, for purposes of clauses (i), (ii) or (iv), the date on which such Event occurs, or for purposes of clause (iii), the date on which such twenty (20) or forty-five (45) Trading Day period is exceeded, being referred to as an “ Event Date”), then, as the sole recourse, the Investors may have hereunder or under applicable law, (x) within five (5) Business Days after an Event Date relating to a failure in clause (i) only, the Company shall pay to each Investor an amount in cash, as liquidated damages and not as a penalty, equal to one percent (1.0%) of the aggregate purchase price paid by such Investor pursuant to the Purchase Agreement for any Registrable Securities held by such Investor on such Event Date; and (y) on each thirty (30)-day anniversary

(or pro rata portion thereof) following any Event Date (including, for the avoidance of doubt, a failure in clause (i), in which case each thirty (30)-day anniversary shall be measured commencing on the 31st day following such Event Date) until the earlier of (1) the applicable Event is cured or (2) the Registrable Securities are eligible for resale pursuant to Rule 144 without manner of sale or volume restrictions, the Company shall pay to each Investor an amount in cash, as partial liquidated damages and not as a penalty (“Liquidated Damages”), equal to one percent (1.0%) of the aggregate purchase price paid by such Investor pursuant to the Purchase Agreement for any unregistered Registrable Securities then held by such Investor. The Parties agree that (1) notwithstanding anything to the contrary herein or in the Purchase Agreement, no Liquidated Damages shall be payable with respect to any period after the expiration of the Effectiveness Period (it being understood that this sentence shall not relieve the Company of any Liquidated Damages accruing prior to the Effectiveness Deadline) and in no event shall the aggregate amount of Liquidated Damages payable to an Investor exceed, in the aggregate, six percent (6.0%) of the aggregate purchase price paid by such Investor pursuant to the Purchase Agreement and (2) in no event shall the Company be liable in any thirty (30)-day period for Liquidated Damages under this Agreement in excess of one percent (1.0%) of the aggregate purchase price paid by the Investors pursuant to the Purchase Agreement. Unless otherwise specified in this Section 2(d), the Liquidated Damages pursuant to the terms hereof shall apply on a daily pro-rata basis for any portion of a month prior to the cure of an Event, except in the case of the first Event Date. Notwithstanding the foregoing, nothing shall preclude any Investor from pursuing or obtaining any specific performance with respect to this Section 2(d) in accordance with applicable law. The Company shall not be liable for Liquidated Damages under this Agreement as to any Registrable Securities which are not permitted by the SEC to be included in a Registration Statement from the time that it is determined that such Registrable Securities are not permitted to be registered until such time as the provisions of this Agreement as to the Remainder Registration Statements required to be filed hereunder are triggered, in which case the provisions of this Section 2(d) shall once again apply, if applicable. In such case, the Liquidated Damages shall be calculated to only apply to the percentage of Registrable Securities which are permitted by the SEC to be included in such Registration Statement. The Effectiveness Deadline for a Registration Statement shall be extended without default or Liquidated Damages hereunder in the event that the Company’s failure to obtain the effectiveness of the Registration Statement on a timely basis results from the failure of a Purchaser to timely provide the Company with information requested by the Company and necessary to complete the Registration Statement in accordance with the requirements of the Securities Act (in which the Effectiveness Deadline would be extended with respect to Registrable Securities held by such Purchaser).

Notwithstanding anything in this Agreement to the contrary, the Company may, by written notice to the Investors, suspend sales under a Registration Statement after the effective date thereof and/or require that the Investors immediately cease the sale of shares of Common Stock pursuant thereto and/or defer the filing of any subsequent Registration Statement if the Company is engaged in a material merger, acquisition or sale or any other pending development that the Company believes may be material, and the Board of Directors determines in good faith, by appropriate resolutions, that, as a result of such activity, (A) it would be materially detrimental to the Company (other than as relating solely to the price of the Common Stock) to maintain a Registration Statement at such time or (B) it is in the best interests of the Company to suspend sales under such registration at such time (an “Excluded Event”). Upon

receipt of such notice, each Investor shall immediately discontinue any sales of Registrable Securities pursuant to such registration until such Investor is advised in writing by the Company that the current Prospectus or amended Prospectus, as applicable, may be used. In no event, however, shall this right be exercised to suspend sales beyond the period during which (in the good faith determination of the Company's Board of Directors) the failure to require such suspension would be materially detrimental to the Company. The Company's rights under this Section 2(e) may be exercised for a period of no more than twenty (20) Trading Days at a time and not more than two times in any twelve-month period, without such suspension being considered as part of an Allowed Delay. Immediately after the end of any suspension period under this Section 2(e), the Company shall take all necessary actions (including filing any required supplemental prospectus) to restore the effectiveness of the applicable Registration Statement and the ability of the Investors to publicly resell their Registrable Securities pursuant to such effective Registration Statement.

COMPANY OBLIGATIONS. AT SUCH TIME AS THE COMPANY IS OBLIGATED TO FILE A REGISTRATION STATEMENT WITH THE SEC PURSUANT TO SECTION 2, THE COMPANY WILL USE COMMERCIALY REASONABLE EFFORTS TO EFFECT THE REGISTRATION OF THE REGISTRABLE SECURITIES IN ACCORDANCE WITH THE TERMS HEREOF, AND PURSUANT THERETO THE COMPANY WILL:

use commercially reasonable efforts to cause such Registration Statement to become effective pursuant to the terms of Section 2 hereof, and to remain continuously effective for a period that will terminate upon the earlier of (i) the date on which all Registrable Securities covered by such Registration Statement as amended from time to time, have been sold, (ii) the third anniversary of the effectiveness of the Registration Statement, or (iii) the date as of which the Investors may sell all of the Registrable Securities covered by such Registration Statement without restriction pursuant to Rule 144 (or any successor thereto) promulgated under the Securities Act (the "Effectiveness Period");

prepare and file with the SEC such amendments and post-effective amendments to the Registration Statement and the Prospectus as may be necessary to keep the Registration Statement effective for the Effectiveness Period and to comply with the provisions of the Securities Act and the Exchange Act with respect to the distribution of all of the Registrable Securities covered thereby;

provide copies to and permit counsel designated by the Investors to review each Registration Statement and all amendments and supplements thereto no fewer than seven (7) days prior to their filing with the SEC;

furnish to the Investors and their legal counsel (i) promptly after the same is prepared and publicly distributed, filed with the SEC, or received by the Company (but not later than two (2) Business Days after the filing date, receipt date or sending date, as the case may be) one (1) copy of any Registration Statement and any amendment thereto, each preliminary prospectus and Prospectus and each amendment or supplement thereto, and each letter written by or on behalf of the Company to the SEC or the staff of the SEC, and each item of correspondence from the SEC or the staff of the SEC, in each case relating to such Registration Statement (other

than any portion thereof which contains information for which the Company has sought confidential treatment), and (ii) such number of copies of a Prospectus, including a preliminary prospectus, and all amendments and supplements thereto and such other documents as each Investor may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such Investor that are covered by the related Registration Statement;

use commercially reasonable efforts to (i) prevent the issuance of any stop order or other suspension of effectiveness and, (ii) if such order is issued, obtain the withdrawal of any such order at the earliest possible moment;

prior to any public offering of Registrable Securities, use commercially reasonable efforts to register or qualify or cooperate with the Investors and their counsel in connection with the registration or qualification of such Registrable Securities for offer and sale under the securities or blue sky laws of such jurisdictions requested by the Investors and do any and all other commercially reasonable acts or things necessary or advisable to enable the distribution in such jurisdictions of the Registrable Securities covered by the Registration Statement; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (i) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(f), (ii) subject itself to general taxation in any jurisdiction where it would not otherwise be so subject but for this Section 3(f), or (iii) file a general consent to service of process in any such jurisdiction;

use commercially reasonable efforts to cause all Registrable Securities covered by a Registration Statement to be listed on each securities exchange, interdealer quotation system or other market on which similar securities issued by the Company are then listed;

immediately notify the Investors, at any time prior to the end of the Effectiveness Period, upon discovery that, or upon the happening of any event as a result of which, the Prospectus includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing, and promptly prepare, file with the SEC and furnish to such holder a supplement to or an amendment of such Prospectus as may be necessary so that such Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances then existing;

otherwise comply with all applicable rules and regulations of the SEC under the Securities Act and the Exchange Act, including, without limitation, Rule 172 under the Securities Act, file any final Prospectus, including any supplement or amendment thereof, with the SEC pursuant to Rule 424 under the Securities Act, promptly inform the Investors in writing if, at any time during the Effectiveness Period, the Company does not satisfy the conditions specified in Rule 172 and, as a result thereof, the Investors are required to deliver a Prospectus in connection with any disposition of Registrable Securities and take such other actions as may be reasonably necessary to facilitate the registration of the Registrable Securities hereunder; and make available to its security holders, as soon as reasonably practicable, but not later than the Availability Date (as defined below), an earnings statement covering a period of at least twelve (12) months, beginning after the effective date of each Registration Statement, which earnings statement shall

satisfy the provisions of Section 11(a) of the Securities Act, including Rule 158 promulgated thereunder (for the purpose of this subsection 3(i), “Availability Date” means the 45th day following the end of the fourth fiscal quarter that includes the effective date of such Registration Statement, except that, if such fourth fiscal quarter is the last quarter of the Company’s fiscal year, “Availability Date” means the 90th day after the end of such fourth fiscal quarter); and

With a view to making available to the Investors the benefits of Rule 144 (or its successor rule) and any other rule or regulation of the SEC that may at any time permit the Investors to sell shares of Common Stock to the public without registration, the Company covenants and agrees, during the Effectiveness Period to: (i) make and keep public information available, as those terms are understood and defined in Rule 144, until the earlier of (A) six (6) months after such date as all of the Registrable Securities may be sold without restriction by the holders thereof pursuant to Rule 144 or any other rule of similar effect or (B) such date as all of the Registrable Securities shall have been resold; (ii) file with the SEC in a timely manner all reports and other documents required of the Company under the Exchange Act; and (iii) furnish to each Investor upon request, as long as such Investor owns any Registrable Securities, (A) a written statement by the Company that it has complied with the reporting requirements of the Exchange Act, (B) a copy of the Company’s most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q, and (C) such other information as may be reasonably requested in order to avail such Investor of any rule or regulation of the SEC that permits the selling of any such Registrable Securities without registration.

DUE DILIGENCE REVIEW; INFORMATION . IF ANY INVESTOR IS REQUIRED UNDER APPLICABLE SECURITIES LAW TO BE DESCRIBED IN THE REGISTRATION STATEMENT AS AN “UNDERWRITER,” UPON THE WRITTEN REQUEST OF SUCH INVESTOR IN CONNECTION WITH SUCH INVESTOR’S DUE DILIGENCE REQUIREMENTS, IF ANY, THE COMPANY SHALL MAKE AVAILABLE FOR INSPECTION BY (I) SUCH INVESTOR AND ITS LEGAL COUNSEL AND (II) ONE FIRM OF ACCOUNTANTS OR OTHER AGENTS RETAINED BY THE INVESTORS (COLLECTIVELY, THE “INSPECTORS”), ALL PERTINENT FINANCIAL AND OTHER RECORDS, AND PERTINENT CORPORATE DOCUMENTS AND PROPERTIES OF THE COMPANY (COLLECTIVELY, THE “RECORDS”), AS SHALL BE REASONABLY DEEMED NECESSARY BY EACH INSPECTOR SOLELY FOR THE PURPOSE OF ESTABLISHING A DUE DILIGENCE DEFENSE UNDER THE SECURITIES ACT, AND CAUSE THE COMPANY’S OFFICERS, DIRECTORS AND EMPLOYEES TO SUPPLY ALL INFORMATION THAT ANY INSPECTOR MAY REASONABLY REQUEST; PROVIDED, HOWEVER, THAT EACH INSPECTOR SHALL AGREE TO HOLD IN STRICT CONFIDENCE AND SHALL NOT MAKE ANY DISCLOSURE (EXCEPT TO SUCH INVESTOR) OR USE OF ANY RECORD OR OTHER INFORMATION WHICH THE COMPANY DETERMINES IN GOOD FAITH TO BE CONFIDENTIAL, AND OF WHICH DETERMINATION THE INSPECTORS ARE SO NOTIFIED, UNLESS (A) THE DISCLOSURE OF SUCH RECORDS IS NECESSARY TO AVOID OR CORRECT A MISSTATEMENT OR OMISSION IN ANY REGISTRATION STATEMENT OR IS OTHERWISE REQUIRED UNDER THE SECURITIES ACT, (B) THE RELEASE OF SUCH RECORDS IS ORDERED PURSUANT TO A FINAL, NON-APPEALABLE SUBPOENA OR ORDER FROM A

COURT OR GOVERNMENT BODY OF COMPETENT JURISDICTION, OR (C) THE INFORMATION IN SUCH RECORDS HAS BEEN MADE GENERALLY AVAILABLE TO THE PUBLIC OTHER THAN BY DISCLOSURE IN VIOLATION OF THIS OR ANY OTHER TRANSACTION DOCUMENT. EACH INVESTOR AGREES THAT IT SHALL, UPON LEARNING THAT DISCLOSURE OF SUCH RECORDS IS SOUGHT IN OR BY A COURT OR GOVERNMENTAL BODY OF COMPETENT JURISDICTION OR THROUGH OTHER MEANS, GIVE PROMPT NOTICE TO THE COMPANY AND ALLOW THE COMPANY, AT ITS EXPENSE, TO UNDERTAKE APPROPRIATE ACTION TO PREVENT DISCLOSURE OF, OR TO OBTAIN A PROTECTIVE ORDER FOR, THE RECORDS DEEMED CONFIDENTIAL. NOTHING HEREIN (OR IN ANY OTHER CONFIDENTIALITY AGREEMENT BETWEEN THE COMPANY AND ANY INVESTOR) SHALL BE DEEMED TO LIMIT THE INVESTORS' ABILITY TO SELL REGISTRABLE SECURITIES IN A MANNER WHICH IS OTHERWISE CONSISTENT WITH APPLICABLE LAWS AND REGULATIONS.

OBLIGATIONS OF THE INVESTORS.

Each Investor shall furnish in writing to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it, as shall be reasonably required to effect the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request. At least five (5) Business Days prior to the first anticipated filing date of any Registration Statement, the Company shall notify each Investor of the information the Company requires from such Investor if such Investor elects to have any of the Registrable Securities included in the Registration Statement. An Investor shall provide such information to the Company at least two (2) Business Days prior to the first anticipated filing date of such Registration Statement if such Investor elects to have any of the Registrable Securities included in the Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that (i) such Investor furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the effectiveness of the registration of such Registrable Securities, and (ii) the Investor execute such documents in connection with such registration as the Company may reasonably request.

Each Investor, by its acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of a Registration Statement hereunder, unless such Investor has notified the Company in writing of its election to exclude all of its Registrable Securities from such Registration Statement.

Each Investor agrees that, upon receipt of any notice from the Company of either (i) the commencement of an Allowed Delay pursuant to Section 2(b)(ii) or (ii) to the happening of an event pursuant to Section 3(h) hereof, such Investor will immediately discontinue disposition of Registrable Securities pursuant to the Registration Statement covering such Registrable Securities, until the Investor is advised by the Company that such dispositions may again be made.

Each Investor covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it or an exemption therefrom in connection with sales of Registrable Securities pursuant to the Registration Statement.

INDEMNIFICATION.

Indemnification by the Company. In the event that any Registrable Securities are included in a Registration Statement pursuant to this Agreement, the Company will indemnify and hold harmless each Investor whose Registrable Securities are included in a Registration Statement and its officers, directors, members, employees and agents, successors and assigns, and each other person, if any, who controls such Investor within the meaning of the Securities Act, against any losses, claims, damages or liabilities, joint or several, to which they may become subject under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement or omission or alleged omission of any material fact contained in any Registration Statement, any preliminary Prospectus (if used prior to the effective date of such Registration Statement) or final Prospectus, or any amendment or supplement thereof; (ii) any blue sky application or other document executed by the Company specifically for that purpose or based upon written information furnished by the Company filed in any state or other jurisdiction in order to qualify any or all of the Registrable Securities under the securities laws thereof (any such application, document or information herein called a “Blue Sky Application”); (iii) the omission or alleged omission to state in a Blue Sky Application a material fact required to be stated therein or necessary to make the statements therein not misleading; (iv) any violation by the Company or its agents of any rule or regulation promulgated under the Securities Act applicable to the Company or its agents and relating to action or inaction required of the Company in connection with such registration; or (v) any failure to register or qualify the Registrable Securities included in any such Registration Statement in any state where the Company or its agents has affirmatively undertaken or agreed in writing that the Company will undertake such registration or qualification on an Investor’s behalf and will reimburse such Investor, and each such officer, director or member and each such controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided, however, that the Company will not be liable in any such case if and to the extent that any such loss, claim, damage or liability arises out of or is based solely upon (w) an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information pertaining to such Investor and furnished in writing by such Investor or any such controlling person specifically for use in such Registration Statement or Prospectus, (x) the use by an Investor of an outdated or defective prospectus after the Company has validly notified such Investor in writing that the prospectus is outdated or defective, (y) an Investor’s (or any other indemnified Person’s) failure to send or give a copy of the prospectus or supplement (as then amended or supplemented), if required (and not exempted) to the Persons asserting an untrue statement or omission or alleged untrue statement or omission at or prior to the written confirmation of the sale of Registrable Securities if such statement or omission was corrected in such Prospectus or supplement, or (z) amounts paid in settlement of any loss, claim, damage or liability if such settlement is effected without the prior written consent of the Company unless, in accordance with Section 6(c) below, such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of the proceeding.

Indemnification by the Investors. Each Investor agrees, severally but not jointly, to indemnify and hold harmless, to the fullest extent permitted by law, the Company, its directors, officers, employees, stockholders and each person who controls the Company (within the meaning of the Securities Act), to the same extent and in the same manner as is set forth in Section 6(a), against any losses, claims, damages, liabilities and expense (including reasonable attorney fees) resulting from any untrue statement of a material fact or any omission of a material fact required to be stated in the Registration Statement or Prospectus or preliminary Prospectus or amendment or supplement thereto or necessary to make the statements therein not misleading, to the extent, but only to the extent that such untrue statement or omission is contained in any information pertaining to such Investor and furnished in writing by such Investor to the Company specifically for inclusion in such Registration Statement or Prospectus or amendment or supplement thereto. In no event shall the liability of an Investor be greater in amount than the dollar amount of the proceeds (net of all expenses paid by such Investor in connection with any claim relating to this Section 6 and the amount of any damages such Investor has otherwise been required to pay by reason of such untrue statement or omission) received by such Investor upon the sale of the Registrable Securities included in the Registration Statement giving rise to such indemnification obligation.

Conduct of Indemnification Proceedings. Any person entitled to indemnification hereunder shall (i) give prompt notice to the indemnifying party of any claim with respect to which it seeks indemnification and (ii) permit such indemnifying party to assume the defense of such claim with counsel reasonably satisfactory to the indemnified party; provided, that any person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such person unless (a) the indemnifying party has agreed to pay such fees or expenses or (b) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such person or (c) in the reasonable judgment of any such person, based upon written advice of its counsel, a conflict of interest exists between such person and the indemnifying party with respect to such claims (in which case, if the person notifies the indemnifying party in writing that such person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such person); and provided, further, that the failure of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties.

No indemnifying party will, except with the consent of the indemnified party, consent to entry of any judgment or enter into any settlement unless such settlement includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding and such settlement does not include any non-monetary limitation on the actions of any indemnified party or any of its affiliates or any admission of fault or liability on behalf of any such indemnified party.

Subject to the terms of this Agreement, all fees and expenses of the indemnified party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such proceeding in a manner not inconsistent with this Section 6) shall be paid to the indemnified party, as incurred, within twenty (20) Trading Days of written notice thereof to the indemnifying party; provided, that the indemnified party shall promptly reimburse the indemnifying party for that portion of such fees and expenses applicable to such actions for which such indemnified party is finally judicially determined to not be entitled to indemnification hereunder).

Contribution. If for any reason the indemnification provided for in the preceding paragraphs (a) and (b) is unavailable to an indemnified party or insufficient to hold it harmless, other than as expressly specified therein, then the indemnifying party shall contribute to the amount paid or payable by the indemnified party as a result of such loss, claim, damage or liability in such proportion as is appropriate to reflect the relative fault of the indemnified party and the indemnifying party, as well as any other relevant equitable considerations. No person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the Securities Act shall be entitled to contribution from any person not guilty of such fraudulent misrepresentation. In no event shall the contribution obligation of a holder of Registrable Securities be greater in amount than the dollar amount of the proceeds (net of all expenses paid by such holder in connection with any claim relating to this Section 6 and the amount of any damages such holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission) received by it upon the sale of the Registrable Securities giving rise to such contribution obligation.

MISCELLANEOUS.

Amendments and Waivers. This Agreement may be amended only by a writing signed by the Company and the Required Investors. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors equally and in the same fashion. The Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company shall have obtained the written consent to such amendment, action or omission to act, of the Required Investors.

Notices. All notices and other communications provided for or permitted hereunder shall be made as set forth in Section 9.5 of the Purchase Agreement.

Assignments and Transfers by Investors. The provisions of this Agreement shall be binding upon and inure to the benefit of the Investors. An Investor may transfer or assign, in whole or from time to time in part, to one or more persons its rights hereunder in connection with the transfer of Registrable Securities by such Investor to such person, provided that such Investor complies with all laws applicable thereto and provides written notice of assignment to the Company promptly after such assignment is effected.

Assignments and Transfers by the Company. This Agreement may not be assigned by the Company (whether by operation of law or otherwise) without the prior written

consent of the Required Investors, provided, however, that in the event that the Company is a party to a merger, consolidation, share exchange or similar business combination transaction in which the Common Stock is converted into the equity securities of another Person, from and after the effective time of such transaction, such Person shall, by virtue of such transaction, be deemed to have assumed the obligations of the Company hereunder, the term “Company” shall be deemed to refer to such Person and the term “Registrable Securities” shall be deemed to include the securities received by the Investors in connection with such transaction unless such securities are otherwise freely tradable by the Investors after giving effect to such transaction.

Benefits of the Agreement. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective permitted successors and assigns of the Parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the Parties or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

Piggy-Back Registrations. If at any time during the Effectiveness Period, except as contemplated by Section 2(c) hereof, there is not an effective Registration Statement covering all of the Registrable Securities and the Company shall determine to prepare and file with the Commission a registration statement relating to an offering for its own account or the account of others under the Securities Act of any of its equity securities, other than on Form S-4 or Form S-8 (each as promulgated under the Securities Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with the stock option or other employee benefit plans, then the Company shall send to each Holder a written notice of such determination and, if within 15 days after the date of such notice, any such Holder shall so request in writing, the Company shall include in such registration statement all or any part of such Registrable Securities such Holder requests to be registered; provided, however, that the Company shall not be required to register any Registrable Securities pursuant to this Section 7(f) that are eligible for resale pursuant to Rule 144 promulgated under the Securities Act without volume limitation or that are the subject of a then effective Registration Statement; provided, further, however, if there is not an effective Registration Statement covering all of the Registrable Securities during the Effectiveness Period, the Company may file a registration statement with the Commission to register equity securities of the Company to be sold on a primary basis, provided that the Company does not sell any such shares until there is an effective Registration Statement covering all of the Registrable Securities. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 7(f) prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration

Counterparts; Faxes. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may also be executed via facsimile, which shall be deemed an original.

Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof but shall be interpreted as if it were written so as to be enforceable to the maximum extent permitted by applicable law, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. To the extent permitted by applicable law, the Parties hereby waive any provision of law which renders any provisions hereof prohibited or unenforceable in any respect.

Further Assurances. The Parties shall execute and deliver all such further instruments and documents and take all such other actions as may reasonably be required to carry out the transactions contemplated hereby and to evidence the fulfillment of the agreements herein contained.

Entire Agreement. This Agreement is intended by the Parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the Parties in respect of the subject matter contained herein. This Agreement supersedes all prior agreements and understandings among the Parties with respect to such subject matter.

Governing Law; Consent to Jurisdiction; Waiver of Jury Trial. This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of Delaware without regard to the choice of law principles thereof. Each of the Parties irrevocably submits to the exclusive jurisdiction of the courts of the Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware (or, if the Delaware Court of Chancery declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware) for the purpose of any suit, action, proceeding or judgment relating to or arising out of this Agreement and the transactions contemplated hereby. Service of process in connection with any such suit, action or proceeding may be served on each Party anywhere in the world by the same methods as are specified for the giving of notices under this Agreement. Each of the Parties irrevocably consents to the jurisdiction of any such court in any such suit, action or proceeding and to the laying of venue in such court. Each Party irrevocably waives any objection to the laying of venue of any such suit, action or proceeding brought in such courts and irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. EACH OF THE PARTIES WAIVES ANY RIGHT TO REQUEST A TRIAL BY JURY IN ANY LITIGATION WITH RESPECT TO THIS AGREEMENT AND REPRESENTS THAT COUNSEL HAS BEEN CONSULTED SPECIFICALLY AS TO THIS WAIVER.

[*Signature page follows*]

IN WITNESS WHEREOF, the Parties have executed this Registration Rights Agreement as of the date first above written.

The Company:

Threshold Pharmaceuticals, Inc.

By: _____

Name: [●]

Title: [●]

The Investors:

[●]

By: _____

Name: [●]

Its: [●]

Address: [●]

Plan of Distribution

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this Prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock or warrants owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell such

shares of common stock or warrants, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock or warrants in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In

addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We will pay certain expenses of the registration of the shares of common stock pursuant to the registration rights agreement, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; *provided, however*, that each selling stockholder will pay all underwriting discounts and selling commissions, if any and any related legal expenses incurred by it. We will indemnify the selling stockholders against certain liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholders specifically for use in this prospectus, in accordance with the related registration rights agreement, or we may be entitled to contribution. We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

NEITHER THESE SECURITIES NOR THE SECURITIES ISSUABLE UPON EXERCISE OF THESE SECURITIES HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OR (B) AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY AND ITS TRANSFER AGENT OR (II) UNLESS SOLD PURSUANT TO RULE 144 UNDER THE SECURITIES ACT.

MOLECULAR TEMPLATES, INC.

WARRANT TO PURCHASE COMMON STOCK

Original Issue Date: [●], 2017

Molecular Templates, Inc., a Delaware corporation (the "Company"), hereby certifies that, for value received, [●] or its permitted registered assigns (the "Holder"), is entitled to purchase from the Company up to a total of [●] shares of common stock, \$0.001 par value per share (the "Common Stock"), of the Company (the "Warrant Shares") at an exercise price per share equal to \$[_____] per share (as adjusted from time to time as provided in Section 9, the "Exercise Price"), at any time and from time to time on or after the date hereof (the "Original Issue Date") and through and including 5:30 p.m., New York City time, on [●], 2024 (the "Expiration Date"), and subject to the following terms and conditions:

This Warrant (this "Warrant") is one of a series of similar warrants issued pursuant to that certain Securities Purchase Agreement, dated [●], 2017, by and among the Company and the Investors identified therein (the "Purchase Agreement"). All such Warrants are referred to herein, collectively, as the "Warrants."

1. Definitions. In addition to the terms defined elsewhere in this Warrant, capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Purchase Agreement.

2. Registration of Warrants. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose, which may be a third-party transfer agent (the "Warrant Register"), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

3. Registration of Transfers. Subject to compliance with all applicable securities laws, the Company shall register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, with the Form of Assignment attached as Schedule 2 hereto duly completed and signed, to the Company's transfer agent or to the Company at its address specified in the Purchase Agreement and (x) delivery, at the request of the Company, of an opinion of counsel reasonably satisfactory to the Company to the effect that the transfer of such portion of this Warrant may be made pursuant to an available exemption from the registration requirements of the Securities Act and all applicable state securities or blue sky laws (other than in connection with any transfer (i) pursuant to an effective registration statement, (ii) to the Company, (iii) pursuant to Rule 144 (provided that such Holder provides the Company with reasonable assurances (in the form of seller and, if applicable, broker representation letters) that the securities may be sold pursuant to such rule) or (iv) in connection with a bona fide pledge) and (y) delivery by the transferee of a written statement to the Company certifying that the transferee is an "accredited investor" as defined in Rule 501(a) under the Securities Act and making the representations and certifications set forth in Sections 5.3, 5.4, 5.5, 5.6, 5.8 and 5.9 of the Purchase Agreement, to the Company at its address specified in the Purchase Agreement. Upon any such registration or transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a "New Warrant") evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder has in respect of this Warrant. The Company shall prepare, issue and deliver at its own expense any New Warrant under this Section 3.

4. Exercise and Duration of Warrant.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by Section 10 at any time and from time to time on or after the Original Issue Date and through and including 5:30 p.m. New York City time, on the Expiration Date. In the event that immediately prior to the close of business on the Expiration Date, the Closing Bid Price of one share of Common Stock (as determined in accordance with Section 10) is greater than the then applicable Exercise Price, this Warrant shall be deemed to be automatically exercised on as "cashless exercise" pursuant to Section 10, and the Company shall deliver the applicable number of shares of Common Stock to the Holder pursuant to the provisions of Section 10.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the "Exercise Notice"), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a "cashless exercise" if so indicated in the Exercise Notice pursuant to Section 10), and the date on which the Exercise Notice is delivered to the Company (as determined in accordance with the notice provisions hereof) is an "Exercise Date." The delivery by (or on behalf of) the Holder of the Exercise Notice and the applicable Exercise Price as provided above shall constitute the Holder's certification to the Company that its representations contained in Sections 5.3, 5.4, 5.5, 5.6, 5.8 and 5.9 of the Purchase Agreement are true and correct as of the Exercise Date and the date on which Holder

pays the Company the Exercise Price as if remade in their entirety (or, in the case of any transferee Holder that is not a party to the Purchase Agreement, such transferee Holder's certification to the Company that such representations are true and correct as to such assignee Holder as of the Exercise Date). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder, but if it is not so delivered then such exercise shall constitute an agreement by the Holder to deliver the original Warrant to the Company as soon as practicable thereafter. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant evidencing the right to purchase the remaining number of Warrant Shares.

5. Delivery of Warrant Shares .

(a) Upon exercise of this Warrant and delivery of the Exercise Price, the Company shall promptly (but in no event later than three Trading Days after the later of the Exercise Date and delivery of the Exercise Price) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate (provided that, if the Registration Statement is not effective and the Holder directs the Company to deliver a certificate for the Warrant Shares in a name other than that of the Holder or an Affiliate of the Holder, it shall deliver to the Company on the Exercise Date an opinion of counsel reasonably satisfactory to the Company to the effect that the issuance of such Warrant Shares in such other name may be made pursuant to an available exemption from the registration requirements of the Securities Act and all applicable state securities or blue sky laws), (i) a certificate for the Warrant Shares issuable upon such exercise, free of restrictive legends, or (ii) an electronic delivery of the Warrant Shares to the Holder's account at the Depository Trust Company ("DTC") or a similar organization, unless in the case of clause (i) and (ii) a registration statement covering the resale of the Warrant Shares and naming the Holder as a selling stockholder thereunder is not then effective or the Warrant Shares are not freely transferable without restriction under Rule 144 by Holders who are not affiliates of the Company, in which case such Holder shall receive a certificate for the Warrant Shares issuable upon such exercise with appropriate restrictive legends. The Holder, or any Person permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date. Notwithstanding anything contained herein to the contrary, if the Holder fails to deliver the documents required to register a transferee as set forth in Section 3 or to provide the documents required under this Section 5(a) to issue a certificate or electronic delivery of the Warrant Shares to any Person(s) other than the Holder, then determination of the three Trading Days shall be tolled until such documents have been delivered to the Company. If the Warrant Shares are to be issued free of all restrictive legends, the Company shall, upon the written request of the Holder, use its reasonable best efforts to deliver, or cause to be delivered, Warrant Shares hereunder electronically through DTC or another established clearing corporation performing similar functions, if available; provided, that, the Company may, but will not be required to, change its transfer agent if its current transfer agent cannot deliver Warrant Shares electronically through such a clearing corporation. "Trading Day" means any day on which the Common Stock are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded; provided that "Trading Day" shall not include any day on which the Common Stock is scheduled to trade on such exchange or market for less than 4.5 hours or any day that the Common Stock are

suspended from trading during the final hour of trading on such exchange or market (or if such exchange or market does not designate in advance the closing time of trading on such exchange or market, then during the hour ending at 4:00:00 p.m., New York time).

(b) If by the close of the third Trading Day after delivery of a properly completed Exercise Notice and the payment of the aggregate Exercise Price in any manner permitted by Section 10, the Company fails to deliver to the Holder a certificate representing the required number of Warrant Shares or such Warrant Shares in electronic form in the manner required pursuant to Section 5(a), and if after such third Trading Day and prior to the receipt of such Warrant Shares, the Holder is required to purchase (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a “Buy-In”), then the Company shall, in its sole discretion, within three Trading Days after the Holder’s request for payment, either (1) pay in cash to the Holder an amount equal to the Holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased, at which point the number of Warrant Shares underlying this Warrant equal to the number of shares of Common Stock so purchased shall be forfeited and the Company’s obligation to deliver such certificate (and to issue such Warrant Shares in certificate or electronic form) shall terminate or (2) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such Warrant Shares or such Warrant Shares in electronic form and pay cash to the Holder in an amount equal to the excess (if any) of Holder’s total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased in the Buy-In over the product of (A) the number of shares of Common Stock purchased in the Buy-In, multiplied by (B) the closing bid price of a share of Common Stock on the Exercise Date. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In, together with applicable confirmations and other evidence reasonably requested by the Company.

(c) To the extent permitted by law, the Company’s obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company (other than breaches related to this Warrant or the Purchase Agreement) or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. Charges, Taxes and Expenses. Issuance and delivery of certificates or electronic form for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense in

respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; provided, however, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

7. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. Reservation of Warrant Shares. The Company represents and warrants that on the date hereof, it has duly authorized and reserved, and covenants that it will at all times during the period this Warrant is outstanding reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the original issuance thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue). The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary certificates for the Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company represents and warrants that the Warrant Shares, when issued and paid for in accordance with the terms of the Transaction Documents and the Warrants, will be issued free and clear of all security interests, claims, liens and other encumbrances other than restrictions imposed by applicable securities laws. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.

9. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares, (iii) combines (by combination, reverse stock split or otherwise) its outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of shares of Common Stock any shares of capital stock of the Company, then in each such case the Exercise Price shall be adjusted to a price determined by multiplying the Exercise Price in effect immediately prior to the effective date of such event by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding on such effective date immediately before giving effect to such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after giving effect to such event. Any adjustment made pursuant to this Section 9(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (ii), (iii) or (iv) of this Section 9(a) shall become effective immediately after the effective date of such subdivision, combination or reclassification.

(b) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by Section 9(a)) or (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset, including cash (in each case, “Distributed Property”), except for any distributions pursuant to a shareholders’ rights plan or similar takeover defense agreement or plan adopted by the Company, then, upon any exercise of this Warrant that occurs after the record date fixed for determination of stockholders entitled to receive such distribution, the Holder shall be entitled to receive, in addition to the Warrant Shares otherwise issuable upon such exercise (if applicable), the Distributed Property that such Holder would have been entitled to receive in respect of such number of Warrant Shares had the Holder been the record holder of such Warrant Shares immediately prior to such record date.

(c) Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects (A) any merger of the Company with (but not into) another Person, in which stockholders of the Company immediately prior to such transaction own less than a majority of the outstanding stock of the surviving entity, or (B) any merger or consolidation of the Company into another Person, (ii) the Company effects any sale of all or substantially all of its assets in one or a series of related transactions, (iii) any tender offer or exchange offer approved or authorized by the Company’s Board of Directors is completed pursuant to which holders of at least a majority of the outstanding Common Stock tender or exchange their shares for other securities, cash or property, or (iv) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a)) (in any such case, a “Fundamental Transaction”), then the Holder shall have the right thereafter to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property

as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “Alternate Consideration”), and the Holder shall no longer have the right to receive Warrant Shares upon exercise of this Warrant. The Company shall not effect any such Fundamental Transaction unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or the corporation purchasing or otherwise acquiring such assets or other appropriate corporation or Person shall assume the obligation to deliver to the Holder, such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant. The provisions of this Section 9(c) shall similarly apply to subsequent transactions of an analogous type to any Fundamental Transaction.

(d) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to Section 9(a), the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) Calculations. All calculations under this Section 9 shall be made to the nearest cent or the nearest share, as applicable.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in reasonable detail the facts upon which such adjustment is based. The Company will promptly deliver a copy of each such certificate to the Holder and to the Company’s transfer agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company, (ii) authorizes or approves, enters into any agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) Trading Days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice.

10. Payment of Exercise Price. The Holder shall either pay the Exercise Price in immediately available funds or the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a “cashless exercise”, in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

$$X = Y [(A-B)/A]$$

where:

X = the number of Warrant Shares to be issued to the Holder.

Y = the total number of Warrant Shares with respect to which this Warrant is being exercised.

A = the average of the Closing Bid Price of the shares of Common Stock (as reported by Bloomberg Financial Markets) for the five consecutive Trading Days ending on the date immediately preceding the Exercise Date.

B = the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For purposes of this Warrant, “Closing Bid Price” means, for any security as of any date, the last reported closing bid price for such security on the Principal Trading Market for such security, as reported by Bloomberg Financial Markets, or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the closing bid price, then the last bid price of such security prior to 4:00 p.m., New York City time, as reported by Bloomberg Financial Markets, or if the foregoing do not apply, the last closing price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg Financial Markets, or, if no closing bid price is reported for such security by Bloomberg Financial Markets, the average of the bid prices of any market makers for such security as reported in the “pink sheets” by Pink Sheets LLC. If the Closing Bid Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value. The Board of Directors’ determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

For purposes of Rule 144, it is intended, understood and acknowledged that the provisions above permitting “cashless exercise” are intended, in part, to ensure that a full or partial exchange of this Warrant pursuant to such provisions will qualify as a conversion, within the meaning of paragraph (d)(3)(ii) of Rule 144, and the holding period for the Warrant Shares shall be deemed to have commenced as to such original Holder, on the Original Issue Date.

[11. Limitations on Exercise . Notwithstanding anything to the contrary contained herein, the number of Warrant Shares that may be acquired by the Holder upon any exercise of this Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to ensure that, following such exercise (or other issuance), the total number of shares of Common Stock then beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act, does not exceed [4.99%][9.99] % of the total number of then issued and outstanding shares of Common Stock (including for such purpose the shares of Common Stock issuable upon such exercise). For such purposes, beneficial ownership shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to such Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and such Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 11 applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by such Holder) and of which a portion of this Warrant is exercisable shall be in the sole discretion of a Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by such Holder) and of which portion of this Warrant is exercisable, in each case subject to such aggregate percentage limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 11, in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Form 10-Q or Form 10-K, as the case may be, (y) a more recent public announcement by the Company or (z) any other notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written request of the Holder, the Company shall within three Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. This provision shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9. [By written notice to the Company, which will not be effective until the 61st day after such notice is delivered to the Company, the Holder may waive the provisions of this Section 11 (but such waiver will not affect any other holder) to change the beneficial ownership limitation to 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant, and the provisions of this Section 11 shall continue to apply. Upon such a change by a Holder of the beneficial ownership limitation from such 4.99% limitation to such 9.99% limitation, the beneficial ownership limitation may not be further waived by such Holder .]]

12. No Fractional Shares . No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number and the Company shall pay the Holder in cash the fair market value (based on the Closing Bid Price) for any such fractional shares.

13. Notices. Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in the Purchase Agreement prior to 5:30 p.m., New York City time, on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in the Purchase Agreement on a day that is not a Trading Day or later than 5:30 p.m., New York City time, on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery. The address and facsimile number of a Person for such notices or communications shall be as set forth in the Purchase Agreement unless changed by such Person by two Trading Days' prior notice to the other Person(s) in accordance with this Section 13.

14. Warrant Agent. The Company shall serve as warrant agent under this Warrant. Upon 15 days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. Miscellaneous.

No Rights as a Stockholder. The Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities, whether such liabilities are asserted by the Company or by creditors of the Company.

Authorized Shares.

(i) The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation or of any requirements of the Trading Market upon which the Common Stock may be listed.

(ii) Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (a) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (b) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant, and (c) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

(iii) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

No Impairment. Except to the extent as may be waived by the holder of this Warrant, the Company will not, by amendment of its charter or through a Fundamental Transaction, dissolution, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder against impairment.

Successors and Assigns. Subject to the restrictions on transfer set forth in this Warrant and compliance with applicable securities laws, this Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the Company and the Holder and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant.

Amendment and Waiver. Except as otherwise provided herein, the provisions of the Warrants may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN

ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE DELAWARE COURT OF CHANCERY AND ANY STATE APPELLATE COURT THEREOF WITHIN THE STATE OF DELAWARE (OR, IF THE DELAWARE COURT OF CHANCERY DECLINES TO ACCEPT JURISDICTION OVER A PARTICULAR MATER, ANY STATE OR FEDERAL COURT WITHIN THE STATE OF DELAWARE) FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN (INCLUDING WITH RESPECT TO THE ENFORCEMENT OF ANY OF THE TRANSACTION DOCUMENTS), AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY WAIVES PERSONAL SERVICE OF PROCESS AND CONSENTS TO PROCESS BEING SERVED IN ANY SUCH SUIT, ACTION OR PROCEEDING BY MAILING A COPY THEREOF VIA REGISTERED OR CERTIFIED MAIL OR OVERNIGHT DELIVERY (WITH EVIDENCE OF DELIVERY) TO SUCH PARTY AT THE ADDRESS IN EFFECT FOR NOTICES TO IT UNDER THE PURCHASE AGREEMENT AND AGREES THAT SUCH SERVICE SHALL CONSTITUTE GOOD AND SUFFICIENT SERVICE OF PROCESS AND NOTICE THEREOF. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

(h) Headings. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.

(i) Severability. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which as closely as possible reflects the intent of the parties hereto, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK,
SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

Molecular Templates, Inc.

By: _____
Name:
Title:

SCHEDULE 1

MOLECULAR TEMPLATES, INC.

FORM OF EXERCISE NOTICE

[To be executed by the Holder to purchase shares of Common Stock under the Warrant]

Ladies and Gentlemen:

(1) The undersigned is the Holder of Warrant No. _____ (the "Warrant") issued by Molecular Templates, Inc., a Delaware corporation (the "Company"). Capitalized terms used herein and not otherwise defined herein have the respective meanings set forth in the Warrant.

(2) The undersigned hereby exercises its right to purchase _____ Warrant Shares pursuant to the Warrant.

(3) The Holder intends that payment of the Exercise Price shall be made as (check one):

- Cash Exercise
- "Cashless Exercise" under Section 10 of the Warrant

(4) If the Holder has elected a Cash Exercise, the Holder shall pay the sum of \$_____ in immediately available funds to the Company in accordance with the terms of the Warrant.

(5) Pursuant to this Exercise Notice, the Company shall deliver to the Holder Warrant Shares determined in accordance with the terms of the Warrant. Please issue (check applicable box):

A certificate of certificates representing the Holder Warrant Shares in the name of the undersigned or in such other name as is specified below:

- The Holder Warrant Shares in electronic form to the following account:
Name and Contact for Broker: _____
Broker no: _____
Account no: _____
Account holder: _____

(6) By its delivery of this Exercise Notice, the undersigned represents and warrants to the Company that in giving effect to the exercise evidenced hereby the Holder will not beneficially own in excess of the number of shares of Common Stock (as determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended) permitted to be owned under Section 11 of the Warrant to which this notice relates.

Dated: _____, _____

Name of Holder: _____

By: _____

Name: _____

Title: _____

(Signature must conform in all respects to name of Holder as specified on the face of the Warrant)

SCHEDULE 2

MOLECULAR TEMPLATES, INC.

FORM OF ASSIGNMENT

[To be completed and executed by the Holder only upon transfer of the Warrant]

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto _____ (the "Transferee") the right represented by the within Warrant to purchase _____ shares of Common Stock of Molecular Templates, Inc., a Delaware corporation (the "Company") to which the within Warrant relates and appoints _____ attorney to transfer said right on the books of the Company with full power of substitution in the premises. In connection therewith, the undersigned represents, warrants, covenants and agrees to and with the Company that:

- (a) the offer and sale of the Warrant contemplated hereby is being made in compliance with Section 4(1) of the United States Securities Act of 1933, as amended (the "Securities Act"), or another valid exemption from the registration requirements of Section 5 of the Securities Act and in compliance with all applicable securities laws of the states of the United States;
- (b) the undersigned has not offered to sell the Warrant by any form of general solicitation or general advertising, including, but not limited to, any advertisement, article, notice or other communication published in any newspaper, magazine or similar media or broadcast over television or radio, and any seminar or meeting whose attendees have been invited by any general solicitation or general advertising;
- (c) the undersigned has read the Transferee's investment letter included herewith, and to its actual knowledge, the statements made therein are true and correct; and
- (d) the undersigned understands that the Company may condition the transfer of the Warrant contemplated hereby upon the delivery to the Company by the undersigned or the Transferee, as the case may be, of a written opinion of counsel (which opinion shall be in form, substance and scope customary for opinions of counsel in comparable transactions) to the effect that such transfer may be made without registration under the Securities Act and under applicable securities laws of the states of the United States.

Dated: _____, ____

(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

Address of Transferee

In the presence of:

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: May 15, 2017

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

Wilfred E. Jaeger, M.D.

Interim 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: May 15, 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 March 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Wilfred E. Jaeger, Interim Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 15, 2017

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

Wilfred E. Jaeger, M.D.

Interim 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 March 31, 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: May 15, 2017

/s/ Joel A. Fernandes

Joel A. Fernandes

Senior Vice President, Finance and Controller
(Principal Financial Officer)