Trovagene, Inc. Form 10-Q August 03, 2018 Table of Contents

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

Form 10-Q

(Mark One)

x QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended June 30, 2018

oTRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

COMMISSION FILE NUMBER 001-35558

TROVAGENE, INC.

(Exact Name of registrant as specified in its charter)

Delaware 27-2004382

to

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

11055 Flintkote Avenue, Suite B, San Diego, California 92121 (Address of principal executive offices) (Zip Code)

(858) 952-7570

(Registrant's telephone number, including area code)

Indicate by check mark whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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 x No o

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 x No o

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

Large accelerated filer o Accelerated filer o

Non-accelerated filer o(Do not check if a smaller reporting company) Smaller reporting company x

Emerging growth company o

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 13(a) of the Exchange Act. o

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

As of July 31, 2018, the issuer had 17,688,773 shares of Common Stock issued and outstanding.

Table of Contents

TROVAGENE, INC.

Table of Contents

		Page
<u>PART I</u>	FINANCIAL INFORMATION	
Item 1.	Financial Statements (unaudited)	
	Condensed Consolidated Balance Sheets	<u>3</u>
	Condensed Consolidated Statements of Operations	4
	Condensed Consolidated Statements of Comprehensive Loss	<u>5</u>
	Condensed Consolidated Statements of Stockholders' Equity	<u>6</u>
	Condensed Consolidated Statements of Cash Flows	7
	Notes to Condensed Consolidated Financial Statements	<u>8</u>
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>18</u>
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	<u>29</u>
Item 4.	Controls and Procedures	<u>29</u>
PART I	I OTHER INFORMATION	
Item 1.	Legal Proceedings	<u>31</u>
Item 1A	Risk Factors	<u>31</u>
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	<u>31</u>
Item 3.	<u>Defaults Upon Senior Securities</u>	<u>31</u>
<u>Item 4.</u>	Mine Safety Disclosures	<u>31</u>
<u>Item 5.</u>	Other Information	<u>31</u>
Item 6:	<u>Exhibits</u>	<u>31</u>
SIGNAT	<u>TURES</u>	
2		
Item 4. Item 5. Item 6: SIGNAT	Mine Safety Disclosures Other Information Exhibits	31 31

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

TROVAGENE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited)

	June 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$18,485,950	\$8,225,764
Short-term investment	31,500	
Accounts receivable and unbilled receivable	124,082	77,095
Prepaid expenses and other current assets	1,001,840	1,165,828
Total current assets	19,643,372	9,468,687
Property and equipment, net	1,803,921	2,426,312
Other assets	320,749	389,942
Total Assets	\$21,768,042	\$12,284,941
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$565,413	\$825,244
Accrued expenses	2,303,366	1,454,587
Deferred rent, current portion	349,565	334,424
Current portion of long-term debt		1,331,515
Total current liabilities	3,218,344	3,945,770
Derivative financial instruments—warrants	67,847	649,387
Deferred rent, net of current portion	1,004,689	1,183,677
Total Liabilities	4,290,880	5,778,834
Commitments and contingencies (Note 8)		
Stockholders' equity		
Preferred stock, \$0.001 par value, 20,000,000 shares authorized; 277,100 designated as		
Series A Convertible Preferred Stock; 60,600 shares outstanding at June 30, 2018 and		
December 31, 2017 with liquidation preference of \$606,000 at June 30, 2018 and	66	60
December 31, 2017; 8,860 designated as Series B Convertible Preferred Stock; 5,650 and	d	
0 shares outstanding at June 30, 2018 and December 31, 2017, respectively		
Common stock, \$0.0001 par value, 150,000,000 shares authorized; 17,305,004 and		
4,399,299 shares issued and outstanding at June 30, 2018 and December 31, 2017,	7,173	5,279
respectively		.=
Additional paid-in capital	201,720,972	179,546,954
Accumulated deficit		(173,046,186)
Total stockholders' equity	17,477,162	6,506,107
Total liabilities and stockholders' equity	\$21,768,042	\$12,284,941

See accompanying notes to the unaudited condensed consolidated financial statements.

TROVAGENE, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

	Three Month 30,	ns Ended June	Six Months E	inded June 30,
	2018	2017	2018	2017
Revenues:				
Royalties	\$52,423	\$44,810	\$101,478	\$110,636
Diagnostic services	39,345	55,501	79,347	84,363
Clinical research services	20,045	1,700	31,124	2,050
Total revenues	111,813	102,011	211,949	197,049
Costs and expenses:				
Cost of revenues	204,436	338,203	570,780	954,629
Research and development	1,952,767	981,715	3,836,605	5,261,545
Selling, general and administrative	2,150,871	4,674,152	4,655,848	8,278,776
Restructuring charges (benefit)	243,335	(3,806	243,335	1,715,998
Total operating expenses	4,551,409	5,990,264	9,306,568	16,210,948
Loss from operations	(4,439,596) (5,888,253	(9,094,619) (16,013,899)
Net interest income (expense)	35,277	(431,871	32,812	(861,268)
Gain (loss) from change in fair value of derivative financial instruments—warrants	711,229	(71,428	581,540	484,078
Gain (loss) on extinguishment of debt	17,974	(1,655,825	17 974	(1,655,825)
Other (loss) income, net	*) 1,566	·) 1,566
Net loss	•) (8,045,811	•) (18,045,348)
1101 1055	(3,740,733) (0,043,011)	(0,555,152) (10,043,340)
Preferred stock dividend payable on Series A Convertible Preferred Stock	(6,060) (6,060	(12,120) (12,120)
Deemed dividend recognized on beneficial conversion features of Series B Convertible Preferred Stock issuance	(2,769,533) —	(2,769,533) —
Net loss attributable to common stockholders	\$(6,522,548) \$(8,051,871)	\$(11,314,785) \$(18,057,468)
Net loss per common share — basic	\$(0.88) \$(3.12	\$(1.88) \$(7.00)
Net loss per common share — diluted	\$(0.88) \$(3.12	\$(1.88)) \$(7.00
Weighted-average shares outstanding — basic Weighted-average shares outstanding — diluted	7,423,463 7,423,463	2,582,645 2,582,645	6,026,345 6,026,345	2,581,372 2,581,372
ricigined average shares outstanding — unuted	7,723,703	2,302,073	0,020,575	2,301,372

See accompanying notes to the unaudited condensed consolidated financial statements.

TROVAGENE, INC. CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (Unaudited)

	Three Month 30,	s Ended June	Six Months E	Ended June 30,	
	2018	2017	2018	2017	
Net loss	\$(3,746,955)	\$(8,045,811)	\$(8,533,132)) \$(18,045,348))
Other comprehensive income (loss):					
Foreign currency translation loss		(9,543) —	(11,942)
Unrealized gain or reversal of previous losses on securities available-for-sale	5	9,519	_	9,065	
Total other comprehensive loss	_	(24) —	(2,877)
Total comprehensive loss	(3,746,955)	(8,045,835	(8,533,132) (18,048,225)
Preferred stock dividend payable on Series A Convertible Preferred Stock	(6,060	(6,060	(12,120) (12,120)
Deemed dividend recognized on beneficial conversion features of Series B Convertible Preferred Stock issuance	(2,769,533)	· —	(2,769,533) —	
Comprehensive loss attributable to common stockholders	\$(6,522,548)	\$(8,051,895)	\$(11,314,785	(18,060,345))

See accompanying notes to the unaudited condensed consolidated financial statements.

TROVAGENE, INC. CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Unaudited)

Balance, January 1, 2018 Stock-based compensation	Preferred Stock Shares 60,600	Preferre Stock Amount \$ 60	dCommon Stock Shares 4,399,299	Common Stock Amount \$ 5,279	Additional Paid-In Capital \$179,546,954 1,627,431	Accumulated Deficit \$(173,046,186)	Total Stockholders' Equity \$6,506,107 1,627,431
Sale of common stock and warrants, net of expenses	_		9,140,000	914	11,778,611	_	11,779,525
Sale of Series B Convertible Preferred Stock, net of expenses Deemed dividend recognized	8,860	9	_	_	4,386,753	_	4,386,762
on beneficial conversion features of Series B Convertible Preferred Stock issuance	_	_	_	_	2,769,533	(2,769,533)	_
Issuance of common stock upon exercise of warrants	_	_	473,497	569	1,612,098	_	1,612,667
Issuance of common stock upon vesting of restricted stock units	_	_	75,400	90	(90)	_	_
Issuance of common stock upon conversion of Series B Convertible Preferred Stock Preferred stock dividend	(3,210)	(3)	3,210,000	321	(318)	_	_
payable on Series A Convertible Preferred Stock	_	_	_	_	_	(12,120)	(12,120)
Issuance of common stock for share rounding as a result of reverse stock split	: _	_	6,808	_	_	_	_
Cumulative adjustment upon adoption of ASC 606	_	_	_	_	_	109,922	109,922
Net loss Balance, June 30, 2018	<u></u>	- \$ 66				(8,533,132) \$(184,251,049)	(8,533,132) \$17,477,162

See accompanying notes to the unaudited condensed consolidated financial statements.

TROVAGENE, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Six Months E	nded June 30, 2017	,
Operating activities			
Net loss	\$(8,533,132)	\$(18,045,34	8)
Adjustments to reconcile net loss to net cash used in operating activities:			
Loss on disposal of assets	198,099	28,097	
Impairment loss	187,500	485,000	
Depreciation and amortization	483,495	645,962	
Stock based compensation expense	1,627,431	1,696,184	
(Gain) loss on extinguishment of debt	(17,974	1,655,825	
Accretion of final fee premium		293,614	
Amortization of discount on debt		113,780	
Net realized loss on short-term investments		6,400	
Amortization of premiums on short-term investments		9,230	
Deferred rent	(163,847)	(136,776)
Interest income accrued on short-term investments		(90,330)
Change in fair value of derivative financial instruments—warrants	(581,540	(484,078)
Changes in operating assets and liabilities:			
Increase in other assets	(199,743)		
Decrease (increase) in accounts receivable and unbilled receivable	62,935	(56,985)
Decrease in prepaid expenses and other current assets	191,321	243,571	
Increase in accounts payable and accrued expenses	638,701	280,520	
Net cash used in operating activities	(6,106,754)	(13,355,334)
Investing activities:			
Capital expenditures, net	(5,100	(20,738)
Maturities of short-term investments		16,431,837	
Purchases of short-term investments	(31,500	(8,804,604)
Sales of short-term investments		16,434,553	
Net cash (used in) provided by investing activities	(36,600	24,041,048	
Financing activities:			
Proceeds from sales of common stock and warrants, net of expenses	11,779,525	106,791	
Proceeds from sales of Series B Convertible Preferred Stock, net of expenses	4,386,762	_	
Proceeds from exercise of warrants	1,612,667	_	
Payment upon debt extinguishment	(175,381)	(1,613,067)
Repayments of long-term debt		(15,000,000)
Repayments of equipment line of credit	(1,200,033)	(313,052)
Net cash provided by (used in) financing activities	16,403,540	(16,819,328)
Effect of exchange rate changes on cash and cash equivalents		2,411	
Net change in cash and cash equivalents	10,260,186	(6,131,203)
Cash and cash equivalents—Beginning of period	8,225,764	13,915,094	
Cash and cash equivalents—End of period	\$18,485,950	\$7,783,891	

Supplementary disclosure of cash flow activity:

Cash paid for taxes	\$800	\$800
Cash paid for interest	\$22,482	\$629,952
Supplemental disclosure of non-cash investing and financing activities:		
Preferred stock dividend payable on Series A Convertible Preferred Stock	\$12,120	\$12,120
Deemed dividend recognized for beneficial conversion features of Series B Convertible	\$2.760.533	\$ —
Preferred Stock issuance	Ψ2,707,333	ψ—
Common stock issued upon conversion of Series B Convertible Preferred Stock	\$321	\$

See accompanying notes to the unaudited condensed consolidated financial statements.

Table of Contents

TROVAGENE, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. Organization and Basis of Presentation

Business Organization and Overview

Trovagene, Inc. ("Trovagene" or the "Company") headquartered in San Diego, California, is a clinical-stage, oncology therapeutics company, using a precision medicine strategy to develop drugs that target mitosis (cell division) to treat various types of cancer, including leukemias/lymphomas and solid tumors.

Trovagene's lead drug candidate, PCM-075, is a Polo-like Kinase 1 ("PLK1") highly-selective adenosine triphosphate ("ATP") competitive inhibitor. PCM-075 has shown preclinical antitumor activity as a single agent and synergy in combination with numerous different chemotherapeutics, including cisplatin, cytarabine, doxorubicin, gemcitabine and paclitaxel, as well as targeted therapies, such as abiraterone acetate (Zytiga®), histone deacetylase ("HDAC") inhibitors, such as belinostat (Beleodaq®), Quizartinib (AC220), a development stage FLT3 inhibitor, and bortezomib (Velcade®). These therapeutics are used clinically for the treatment of many leukemias/lymphomas and solid tumor cancers, including Acute Myeloid Leukemia ("AML"), Non-Hodgkin Lymphoma ("NHL"), metastatic Castration-Resistant Prostate Cancer ("mCRPC"), Adrenocortical Carcinoma ("ACC"), and Triple Negative Breast Cancer ("TNBC").

PCM-075 was developed to have high selectivity to PLK1 (at low nanomolar IC₅₀ levels), to be administered orally, and to have a relatively short drug half-life of approximately 24 hours compared to other pan PLK inhibitors. A safety study of PCM-075 has been successfully completed in patients with advanced metastatic solid tumors and published in 2017 in Investigational New Drugs. The Company has two active Investigational New Drug ("INDs") applications in place with the U.S. Food and Drug Administration ("FDA") for PCM-075, allowing the Company to pursue clinical development in leukemias/lymphomas and solid tumor cancers. Trovagene continues to focus on advancing its two active clinical trials with PCM-075. The Company is currently enrolling a Phase 1b/2 open-label clinical trial of PCM-075 in combination with standard-of-care chemotherapy in patients with AML. The Phase 1b/2 clinical trial is being led by Hematologist Jorge Eduardo Cortes, M.D., Deputy Department Chair, Department of Leukemia, Division of Cancer Medicine, the University of Texas MD Anderson Cancer Center. Nine clinical trial sites across the U.S. are currently participating in this trial. In addition, the Company is recruiting patients for its Phase 2 open-label clinical trial of PCM-075 in combination with abiraterone acetate (Zytiga®) and prednisone in patients with mCRPC. This trial is being led by Dr. David Einstein at the Genitourinary Oncology Program at Beth Israel Deaconess Medical Center ("BIDMC") and Harvard Medical School and, in addition to BIDMC, this trial is being conducted at Dana Farber Cancer Institute ("DFCI") and Massachusetts General Hospital ("MGH").

Trovagene's intellectual property and proprietary technology enables the Company to analyze circulating tumor DNA ("ctDNA") and clinically actionable markers to identify patients most likely to respond to specific cancer therapies. The Company plans to continue to vertically integrate its biomarker strategy with the development of targeted cancer therapeutics.

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements of Trovagene, which include all accounts of its wholly owned subsidiary, Trovagene, Srl (dissolved in October 2017), have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). All intercompany balances and transactions have been eliminated.

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with GAAP and the rules and regulations of the Securities and Exchange Commission ("SEC") related to a quarterly report on Form 10-Q. Certain information and note disclosures normally included in annual financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to those rules and regulations. The unaudited interim condensed consolidated financial statements reflect all adjustments consisting of normal recurring adjustments which, in the opinion of management, are necessary for a fair statement of the Company's financial position and the results of its operations and cash flows for the periods presented. The unaudited condensed balance sheet at December 31, 2017 has been derived from the audited financial statements at that date but does not include all of the information and disclosures required by GAAP for annual financial statements. The operating results presented in these unaudited interim condensed consolidated financial statements are not necessarily indicative of the results that may be expected for any future periods. These unaudited interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements

and the notes thereto for the year ended December 31, 2017 included in the Company's annual report on Form 10-K filed with the SEC on February 26, 2018.

The Company made a reverse split of its common stock, \$0.0001 par value, at a ratio of 1 for 12, effective June 1, 2018. All share and per share information in the unaudited condensed consolidated financial statements and the accompanying notes have been retroactively adjusted to reflect the reverse stock split for all periods presented.

Liquidity

Trovagene's condensed consolidated financial statements as of June 30, 2018 have been prepared under the assumption that Trovagene will continue as a going concern, which assumes that the Company will realize its assets and satisfy its liabilities in the normal course of business. The accompanying financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from the outcome of the uncertainty concerning the Company's ability to continue as a going concern.

The Company has incurred net losses since its inception and has negative operating cash flows. Considering the Company's current cash resources, including the net proceeds received from the offering of its equity securities in June 2018, management believes the Company's existing resources will be sufficient to fund the Company's planned operations through June 2019. On April 6, 2018, the Company paid off the outstanding Loan and Security Agreement ("Equipment Line of Credit") entered in November 2015 to Silicon Valley Bank ("SVB"). Based on its current business plan and assumptions, the Company expects to continue to incur significant losses and require significant additional capital to further advance its clinical trial programs and support its other operations. The Company has based its cash sufficiency estimates on its current business plan and its assumptions that may prove to be wrong. The Company could utilize its available capital resources sooner than it currently expects, and it could need additional funding to sustain its operations even sooner than currently anticipated. These circumstances raise substantial doubt about the Company's ability to continue as a going concern. For the foreseeable future, the Company's ability to continue its operations is dependent upon its ability to obtain additional capital.

The Company cannot be certain that additional funding will be available on acceptable terms, or at all. To the extent that the Company can raise additional funds by issuing equity securities, the Company's stockholders may experience significant dilution.

If the Company is unable to raise additional capital when required or on acceptable terms, it may have to significantly delay, scale back or discontinue the development and/or commercialization of one or more of its product candidates, all of which would have a material adverse impact on the Company's operations. The Company may also be required to:

• Seek collaborators for product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; and

Relinquish licenses or otherwise dispose of rights to technologies, product candidates or products that the Company would otherwise seek to develop or commercialize themselves, on unfavorable terms.

The Company is evaluating the following options to raise additional capital, increase revenue, as well as reduce costs, in an effort to strengthen its liquidity position:

Raising capital through public and private equity offerings;

Introducing operation and business development initiatives to bring in new revenue streams;

Reducing operating costs by identifying internal synergies; and

Engaging in strategic partnerships.

As of July 31, 2018, the Company has received approximately \$1.6 million upon exercise of 5,681,667 warrants in connection with the December 2017 public offering. The Company continually assesses its spending plans to effectively and efficiently address its liquidity needs.

Table of Contents

NASDAQ Notice

On September 5, 2017, the Company received a written notice from the NASDAQ Stock Market LLC ("NASDAQ") that it was not in compliance with NASDAQ Listing Rule 5550(a)(2) for continued listing on the NASDAQ Capital Market, as the minimum bid price of the Company's common stock had been below \$1.00 per share for 30 consecutive business days. In accordance with NASDAQ Listing Rule 5810(c)(3)(A), the Company had a period of 180 calendar days, or until March 5, 2018, to regain compliance with the minimum bid price requirement.

On March 6, 2018, the NASDAQ Capital Market informed the Company that it is eligible for an additional 180 calendar day period until September 4, 2018 to regain compliance with the minimum \$1.00 bid price per share requirement. To regain compliance, the closing bid price of the Company's common stock must meet or exceed \$1.00 per share for at least ten consecutive business days during this 180 calendar day period.

2. Summary of Significant Accounting Policies

During the six months ended June 30, 2018, there have been no changes to the Company's significant accounting policies as described in its Annual Report on Form 10-K for the fiscal year ended December 31, 2017, except as described below.

Revenue Recognition

The Company recognizes revenue when control of its products and services is transferred to its customers in an amount that reflects the consideration it expects to receive from its customers in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the contract price, allocating the contract price to the distinct performance obligations in the contract, and recognizing revenue when the performance obligations have been satisfied. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. The Company considers a performance obligation satisfied once it has transferred control of a good or service to the customer, meaning the customer has the ability to use and obtain the benefit of the good or service. The Company recognizes revenue for satisfied performance obligations only when it determines there are no uncertainties regarding payment terms or transfer of control. For sales-based royalties, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Royalty and License Revenues

The Company licenses and sublicenses its patent rights to healthcare companies, medical laboratories and biotechnology partners. These agreements may involve multiple elements such as license fees, royalties and milestone payments. Revenue is recognized when the criteria described above have been met as well as the following:

- •Up-front nonrefundable license fees pursuant to agreements under which the Company has no continuing performance obligations are recognized as revenues on the effective date of the agreement and when collection is reasonably assured.
- •Minimum royalties are recognized as earned, and royalties are earned based on the licensee's use. The Company estimates and records licensee's sales based on historical usage rate and collectability.

Diagnostic Service Revenues

Revenue for clinical laboratory tests may come from several sources, including commercial third-party payors, such as insurance companies and health maintenance organizations, government payors, such as Medicare and Medicaid in the United States, patient self-pay and, in some cases, from hospitals or referring laboratories who, in turn, might bill third-party payors for testing. This revenue stream does not meet the criteria for contracts with a customer under ASC 606 because it is not probable that the Company will collect substantially all the consideration to which it will be entitled in exchange for the goods and services transferred, nor can it reliably determine the expected transaction price. Therefore, the Company is recognizing diagnostic service revenue on the cash collection basis until such time as it is able to properly estimate collections on third party reimbursements.

Clinical Research Revenue

Revenue from clinical research consists of revenue from the sale of urine and blood collection supplies and tests performed under agreements with our clinical research and business development partners. Revenue is recognized when supplies and/or test results are delivered, which is when control of the product is deemed to be transferred.

Restructuring

Restructuring costs are included in loss from operations in the consolidated statements of operations. The Company has accounted for these costs in accordance with ASC Topic 420, Exit or Disposal Cost Obligations. One-time termination benefits are recorded at the time they are communicated to the affected employees. In March 2017, the Company announced a restructuring plan which was completed as of December 31, 2017. In May 2018, the Company closed its Clinical Laboratory Improvement Amendments ("CLIA") - certified laboratory operations. Costs associated with winding down the CLIA laboratory were recorded in the restructuring cost in the June 30, 2018 financial statements. See Note 9 to the consolidated financial statements for further information.

Net Loss Per Share

Basic and diluted net loss per share is presented in conformity with ASC Topic 260, Earnings per Share, for all periods presented. In accordance with this guidance, basic net loss per common share was determined by dividing net loss applicable to common stockholders by the weighted-average common shares outstanding during the period. Preferred dividends are included in income available to common stockholders in the computation of basic and diluted earnings per share. Diluted net loss per share is computed by dividing the net loss by the weighted average number of common shares and common share equivalents outstanding for the period. Common share equivalents are only included when their effect is dilutive.

The following table sets forth the computation of basic and diluted earnings per share:

	Three Month	S	Six Months		
	Ended June 3	0,	Ended June 30	,	
	2018	2017	2018	2017	
Numerator: Net loss attributable to common shareholders	\$(6,522,548)	\$(8,051,871)	\$(11,314,785)	\$(18,057,468	()
Adjustment for gain from change in fair value of derivative	e		_	_	
financial instruments—warrants	* * * * * * * * * * * * * * * * * * * *	*	*	*	
Net loss used for diluted loss per share	\$(6,522,548)	\$(8,051,871)	\$(11,314,785)	\$(18,057,468	()
Denominator for basic and diluted net loss per share:					
Weighted-average shares used to compute basic loss per share	7,423,463	2,582,645	6,026,345	2,581,372	
Adjustments to reflect assumed exercise of warrants	_	_		_	
Weighted-average shares used to compute diluted net loss per share	7,423,463	2,582,645	6,026,345	2,581,372	
Net loss per share attributable to common stockholders:					
Basic	\$(0.88)	\$(3.12)	\$(1.88)	\$(7.00)
Diluted	\$(0.88)	\$(3.12)	\$(1.88)	\$(7.00)

The following table sets forth the outstanding potentially dilutive securities that have been excluded in the calculation of diluted net loss per share because their effect was anti-dilutive:

	June 30,	
	2018	2017
Options to purchase Common Stock	540,998	299,096
Warrants to purchase Common Stock	22,189,533	360,740
Restricted Stock Units	12,401	121,025
Series A Convertible Preferred Stock	5,261	5,261
Series B Convertible Preferred Stock	5,650,000	_
	28,398,193	786,122

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, Leases. The new standard establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for most leases. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The new standard will impact the Company's accounting for its office leases and the Company is currently evaluating the impact of the new standard on its consolidated financial statements.

3. Fair Value Measurements

The following table presents the Company's assets and liabilities that are measured and recognized at fair value on a recurring basis classified under the appropriate level of the fair value hierarchy as of June 30, 2018 and December 31, 2017:

	Fair Value M June 30, 2019 Quoted Price in Active Markets for Identical Ass and Liabilitie (Level 1)	SSignificant Other Observable	Significant Unobservable	Total
Assets:	*			*
Money market fund (1)	\$18,469,871		_\$	\$18,469,871
Total Assets	\$18,469,871	\$ -	_\$ —	\$18,469,871
Liabilities:				
Derivative financial instruments—warrar	n t \$	\$ -	- \$ 67,847	\$67,847
Total Liabilities	\$ —	\$ -	- \$ 67,847	\$67,847
	Fair Value M	leasurements	s at	
	December 31	1, 2017		
	Quoted Price	•	Significant	Total
		Other	Unobservable	
	Markets for	Observable	Inputs	
	Identical Ass		(Level 3)	
	and Liabilitie	•	(LCTCI 3)	

(Level 1)

	(/		
Assets:			
Money market fund (1)	\$8,309,964	\$ \$	\$8,309,964
Total Assets	\$8,309,964	\$ \$	\$8,309,964
Liabilities:			
Derivative financial instruments-	—warrant\$—	\$ — \$ 649,387	\$649,387
Total Liabilities	\$	\$ \$ 649,387	\$649,387

⁽¹⁾ Included as a component of cash and cash equivalents on the accompanying condensed consolidated balance sheets.

The following table sets forth a summary of changes in the fair value of the Company's Level 3 liabilities for the six months ended June 30, 2018:

	Balance at	Realized	Balance
Description	December		at
	31, 2017	losses	June 30, 2018
Derivative financial instruments—warrant	ts\$ 649,387	\$(581,540)	\$67,847

The change in the fair value of the "derivative financial instruments—warrants" is recorded as a gain or loss in the Company's consolidated statement of operations. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. At each reporting period, the Company reviews the assets and liabilities that are subject to ASC Topic 815-40 and ASC Topic 480-10. At each reporting period, all assets and liabilities for which the fair value measurement is based on significant unobservable inputs or instruments that trade infrequently and therefore have little or no price transparency are classified as Level 3.

4. Property and Equipment

Property and equipment consist of the following:

	As of June 30, 2018	As of December 31, 2017
Furniture and office equipment	\$1,072,156	\$1,076,709
Leasehold improvements	1,994,514	1,994,514
Laboratory equipment	912,940	1,426,581
	3,979,610	4,497,804
Less—accumulated depreciation and amortization	o(n2,175,689)	(2,071,492)
Property and equipment, net	\$1,803,921	\$2,426,312

5. Equipment Line of Credit

In November 2015, the Company entered into a Loan and Security Agreement ("Equipment Line of Credit") with SVB that provided for cash borrowings for equipment ("Equipment Advances") of up to \$2.0 million, secured by the equipment financed. Under the terms of the agreement, interest is equal to 1.25% above the Prime Rate. Interest only payments were due on borrowings through November 30, 2016, with both interest and principal payments commencing in December 2016. All unpaid principal and interest on each Equipment Advance will be due on November 1, 2019. The Company has an obligation to make a final payment equal to 7% of total amounts borrowed at the loan maturity date. The Company is also subject to certain affirmative and negative covenants under the Equipment Line of Credit.

On June 20, 2017, the Company received a Notice of Event of Default ("Default Letter") from SVB which stated that Events of Default had occurred and SVB will decide in its sole discretion whether or not to exercise rights and remedies. On April 6, 2018, the Company paid approximately \$1,100,000 to SVB. This payment repaid the outstanding Equipment Line of Credit loan in full. The Company recorded \$25,161 in interest expense related to the Equipment Line of Credit during the six months ended June 30, 2018.

6. Derivative Financial Instruments — Warrants

Based upon the Company's analysis of the criteria contained in ASC Topic 815-40, Contracts in Entity's Own Equity ("ASC 815-40") or ASC Topic 480-10, Distinguishing Liabilities from Equity ("ASC 480-10"), Trovagene determined that certain warrants issued in connection with the execution of certain equity financings must be recorded as derivative liabilities. In accordance with ASC 815-40 and ASC 480-10, the warrants are also being re-measured at each balance sheet date based on estimated fair value, and any resultant change in fair value is being recorded in the Company's condensed consolidated statements of operations. The Company estimates the fair value of these warrants using the Black-Scholes option pricing model.

Table of Contents

The range of assumptions used to determine the fair value of the warrants valued using the Black-Scholes option pricing model during the periods indicated was:

	Six Months Ended June 30,			
	2018		2017	
Estimated fair value of Trovagene common stock	0.77-4.20		13.80-15.12	
Expected warrant term	0.5-5.1 years		1.5-1.8 years	;
Risk-free interest rate	1.76-2.71%		1.27-1.38%	
Expected volatility	91-131%		98-109%	
Dividend yield	0	%	0	%

Expected volatility is based on historical volatility of Trovagene's common stock. The warrants have a transferability provision and based on guidance provided in Staff Accounting Bulletin ("SAB") No. 107, Share-Based Payment ("SAB No. 107"), for instruments issued with such a provision, Trovagene used the remaining contractual term as the expected term of the warrants. The risk-free rate is based on the U.S. Treasury security rates consistent with the expected remaining term of the warrants at each balance sheet date.

The following table sets forth the components of changes in the Company's derivative financial instruments—warrants liability balance, valued using the Black-Scholes option pricing method, for the periods indicated.

		Number	Derivative
Date	Description	of	Instrument
		Warrants	Liability
December 31, 2017	Balance of derivative financial instruments—warrants liability	467,584	\$649,387
	Change in fair value of derivative financial instruments—warrants during the		
	period recognized as a gain in the condensed consolidated statements of		(581,540)
	operations		
June 30, 2018	Balance of derivative financial instruments—warrants liability	467,584	\$67,847

7. Stockholders' Equity

Common Stock

During the six months ended June 30, 2018, the Company issued a total of 12,905,705 shares of Common Stock. The Company received gross proceeds of approximately \$18.0 million from the sale of 9,140,000 shares of its common stock, 20,700,000 warrants, and 8,860 shares of Series B Convertible Preferred Stock through an underwritten public offering in June 2018. 473,497 shares were issued upon exercise of warrants for a weighted-average price of \$3.41. 75,400 shares were issued upon vesting of restricted stock units ("RSUs") and 3,210,000 shares were issued upon conversion of 3,210 shares of Series B Convertible Preferred Stock. In addition, 6,808 shares were issued for share rounding as a result of the reverse stock split.

Stock Options

Stock-based compensation expense related to Trovagene equity awards have been recognized in operating results as follow:

Three Months Ended	Six Months Ended June
June 30,	30.

	2018	2017	2018	2017
Included in research and development expense	\$111,812	\$206,463	\$507,521	\$578,663
Included in cost of revenue	(9,143)	15,209	30,488	41,365
Included in selling, general and administrative expense	118,631	600,069	1,089,422	1,201,378
Benefit from restructuring	_	(46,356)	_	(125,222)
Total stock-based compensation expense	\$221,300	\$775,385	\$1,627,431	\$1,696,184

The unrecognized compensation cost related to non-vested stock options outstanding at June 30, 2018 and 2017, net of expected forfeitures, was \$650,165 and \$3,456,979, respectively, which is expected to be recognized over a weighted-average remaining vesting period of 1.4 and 2.5 years, respectively. The weighted-average remaining contractual term of outstanding options as of June 30, 2018 was approximately 7.8 years. The total fair value of stock options vested during the six months ended June 30, 2018 and 2017 was \$1,246,260 and \$2,796,924, respectively.

The estimated fair value of stock option awards was determined on the date of grant using the Black-Scholes option valuation model with the following weighted-average assumptions during the following periods indicated:

	Six Mont	ths	Ended Jui	ne
	30,			
	2018		2017 (1)	
Risk-free interest rate	2.43	%	_	%
Dividend yield	0	%	0	%
Expected volatility	90.32	%	_	%
Expected term	5.2 years		0.0 years	

(1) No options granted during the six months ended June 30, 2017.

A summary of stock option activity and changes in stock options outstanding is presented below:

	Total Options	Weighted-Average Exercise Price Per Share		Intrinsic Value	
Balance outstanding, December 31, 2017	374,251	\$	48.52	\$	
Granted	263,077	\$	3.60		
Canceled / Forfeited	(95,121)	\$	50.17		
Expired	(1,209)	\$	36.00		
Balance outstanding, June 30, 2018	540,998	\$	26.41	\$	
Exercisable at June 30, 2018	402,488	\$	31.04	\$	

On May 30, 2018, the number of authorized shares in the Trovagene 2014 Equity Incentive Plan ("2014 EIP") was increased from 791,667 to 1,458,334. As of June 30, 2018 there were 801,939 shares available for issuance under the 2014 EIP.

Restricted Stock Units

There were no RSUs granted during the six months ended June 30, 2018. The weighted-average grant date fair value of the RSUs was \$19.08 per share during the six months ended June 30, 2017.

A summary of the RSU activity is presented below:

		We	eighted-Average	
	Number	Gra	ant Date Fair	Intrinsic
	of Shares	Va	lue	Value
		Per	Share	
Non-vested RSUs outstanding, December 31, 2017	106,200	\$	17.22	\$391,878
Vested	(75,400)	\$	14.21	\$266,491
Forfeited	(18,399)	\$	24.60	
Non-vested RSUs outstanding, June 30, 2018	12,401	\$	24.60	\$9,549

At June 30, 2018 and 2017, total unrecognized compensation cost related to non-vested RSUs were \$220,482 and \$1,310,838, both of which are expected to be recognized over a weighted-average period of 2.5 years, respectively. The total fair value of vested RSUs during the six months ended June 30, 2018 and 2017 were \$1,071,069 and \$1,097,880, respectively.

Warrants

A summary of warrant activity and changes in warrants outstanding, including both liability and equity classifications is presented below:

	Total Warrants	We	eighted-Average	Weighted-Average		
	Total Warrants		(1)		ercise Price	Remaining Contractual
	(1)		Share	Term (1)		
Balance outstanding, December 31, 2017	1,936,641	\$	11.34	4.4		
Granted	20,700,000	\$	1.10			
Exercised	(447,108)	\$	3.60			
Balance outstanding, June 30, 2018	22,189,533	\$	1.94	4.9		

(1) Excluded the pre-funded warrants to purchase 26,389 shares of common stock at a nominal exercise price of \$0.12 per share. The pre-funded warrants were exercised in full during the six months ended June 30, 2018.

Series B Convertible Preferred Stock

On June 12, 2018, the Company closed an underwritten public offering for total gross proceeds of \$18.0 million. The securities offered by the Company consisted of (i) 9,140,000 shares of common stock, at an offering price of \$1.00 per share, (ii) warrants to purchase an aggregate of 20,700,000 shares of common stock, including the over-allotment option for 2,700,000 option warrants, at an exercise price of \$1.10 per share, and (iii) 8,860 shares of Series B Convertible Preferred Stock, with a stated value of \$1,000, and convertible into an aggregate of 8,860,000 shares of common stock. The conversion feature of the Series B Convertible Preferred Stock at the time of issuance was determined to be beneficial on commitment date. Because the Series B Convertible Preferred Stock is perpetual with no stated maturity date, and the conversions may occur any time from inception, the Company immediately recorded a one-time, non-cash deemed dividend of \$2.8 million related to the beneficial conversion feature arising from the issuance of Series B Convertible Preferred Stock. This one-time, non-cash deemed dividend increased the Company's net loss attributable to common stockholders and net loss per share.

The holders of Series B Convertible Preferred Stock are entitled to receive dividends on an as-if-converted-to-Common-Stock basis when, as and if such dividends are paid on shares of the Common Stock. Each share of Series B Convertible Preferred Stock shall entitle the holder to vote on an as-if-converted-to-Common-Stock basis (not exceeding the Beneficial Ownership Limitation). Upon any liquidation, dissolution or winding-up of the Company, the holders of Series B Convertible Preferred Stock are entitled to participate on an as-if-converted-to-Common Stock basis (without giving effect to the Beneficial Ownership Limitation) with holders of the Common Stock in any distribution of assets of the Company. Each share of Series B Convertible Preferred Stock is convertible at the option of the holder into that number of shares of Common Stock determined by dividing the stated value of \$1,000 per share, by the conversion price of \$1.00 per share.

As of June 30, 2018 and 2017, there were 5,650 and 0 shares of Series B Convertible Preferred Stock outstanding.

8. Commitments and Contingencies

Executive and Consulting Agreements

The Company has longer-term contractual commitments with various consultants and employees. Certain employment agreements provide for severance payments.

Lease Agreements

The Company leases approximately 26,100 square feet of office and laboratory space at a monthly rental rate of approximately \$68,000. The lease will expire on December 31, 2021. The Company currently subleases certain office space and records the rental receipt under the subleases as a reduction of its rent expense.

Research and Development and Clinical Trial Agreements

In March 2017, the Company entered into a license agreement with Nerviano Medical Sciences S.r.l. ("Nerviano") which granted the Company development and commercialization rights to NMS-1286937, which Trovagene refers to as PCM-075. PCM-075 is an oral, investigative drug and a highly-selective adenosine triphosphate competitive inhibitor of the serine/threonine PLK 1. The Company plans to develop PCM-075 in patients with leukemias/lymphomas and solid tumor cancers. Upon execution of the agreement, the Company paid \$2.0 million in license fees which were expensed to research and development costs. Under the agreement, the Company is committed to pay \$1.0 million for services provided by Nerviano, such as the costs to manufacture drug product, no later than June 30, 2019. As of June 30, 2018, approximately \$366,000 has been paid for services provided. Terms of the agreement also provide for the Company to pay royalties based on certain development and sales milestones.

The Company is a party to various agreements under which it licenses technology on an exclusive basis in the field of human diagnostics. License fees are generally calculated as a percentage of product revenues, with rates that vary by agreement. To date, payments have not been material.

Litigation

Trovagene does not believe that it has legal liabilities that are probable or reasonably possible that require either accrual or disclosure. From time to time, the Company may become involved in various lawsuits and legal proceedings that arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in matters may arise from time to time that may harm the Company's business. As of the date of this report, management believes that there are no claims against the Company, which it believes will result in a material adverse effect on the Company's business or financial condition.

9. Restructuring Charges

In May 2018, the Company closed its CLIA laboratory operations in order to streamline the Company's business model. The loss recognized from disposition of CLIA laboratory was reported as restructuring charges, a component of operating loss, in the June 30, 2018 condensed consolidated financial statements. During the six months ended June 30, 2018, the Company recorded total restructuring charges of approximately \$243,000 for CLIA laboratory disposal transactions, of which, approximately \$187,000 was related to impairment loss on CLIA laboratory license and approximately \$56,000 was related to loss on disposal of property and equipment and other non-capital assets.

In March 2017, the Company announced a strategic restructuring plan in connection with the expansion of precision medicine therapeutics to its business. The restructuring plan included a reduction in force and was completed in the last quarter of 2017. Restructuring charges of approximately \$1.7 million were incurred and have been included as a component of operating loss for the six months ended June 30, 2017. Of the total restructuring charges, approximately \$1.2 million was related to termination of employees and an approximately \$0.5 million charge related to impaired license fees.

10. Subsequent Event

On July 30, 2018, the Company entered into a Severance Agreement and Mutual Release (the "Agreement") with William Welch, the Company's former Chief Executive Officer, specifying the terms of Mr. Welch's termination of service with the Company. Pursuant to the Agreement, Mr. Welch will be paid a lump sum of \$350,000 less applicable federal, state and local tax withholdings on the eighth day after execution of the Agreement. The severance payment amount has been accrued within the condensed consolidated balance sheet as of June 30, 2018. The Agreement contains mutual releases on behalf of Mr. Welch and the Company.

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

Forward-Looking Statements

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding the future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue, "anticipate," "intend," "should," "plan," "expect," and similar expressions, as they relate to us, are intended to identify forward-looking statements. We have based these forward-looking statements largely on current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions.

In addition, our business and financial performance may be affected by the factors that are discussed under "Risk Factors" in the Annual Report on Form 10-K for the year ended December 31, 2017, filed on February 26, 2018, and on Form 10-Q for the period ended March 31, 2018, filed on May 8, 2018. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur. Although we believe that the expectations reflected in the forward looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

The following discussion and analysis is qualified in its entirety by, and should be read in conjunction with, the more detailed information set forth in the financial statements and the notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q. This discussion should not be construed to imply that the results discussed herein will necessarily continue into the future, or that any conclusion reached herein will necessarily be indicative of actual operating results in the future. Such discussion represents only the best present assessment of our management.

Overview

We are a clinical-stage, oncology therapeutics company, using a precision medicine strategy to develop drugs that target mitosis (cell division) to treat various types of cancer, including leukemias/lymphomas and solid tumors.

On March 15, 2017, we announced that we licensed PCM-075, a PLK1 inhibitor, from Nerviano, pursuant to a license agreement with Nerviano dated March 13, 2017. PCM-075 was developed to have high selectivity to PLK1 (at low nanomolar IC₅₀ levels), to have ideal pharmacokinetics, including oral bioavailability and administration and a drug half-life of approximately 24 hours. A safety study of PCM-075 has been successfully completed in patients with advanced metastatic solid tumors and published in 2017 in Investigational New Drugs. We currently are enrolling a Phase 1b/2 open-label clinical trial of PCM-075 in combination with standard-of-care chemotherapy in patients with AML. The Phase 1b/2 clinical trial is led by Hematologist Jorge Eduardo Cortes, M.D., Deputy Department Chair, Department of Leukemia, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center. Nine clinical trial sites across the U.S. are currently participating in this trial. In addition, the Company is recruiting patients

for its Phase 2 open-label clinical trial of PCM-075 in combination with abiraterone acetate (Zytiga[®]) and prednisone in patients with mCRPC. This trial is being led by Dr. David Einstein at the Genitourinary Oncology Program at BIDMC and Harvard Medical School and, in addition to BIDMC, this trial is being conducted at DFCI and MGH.

Our intellectual property and proprietary technology enables us to analyze ctDNA and clinically actionable biomarkers to identify patients most likely to respond to specific cancer therapies. We plan to continue to vertically integrate our tumor genomics technology with the development of targeted cancer therapeutics.

We believe PCM-075 is the only first-in-class, 3rd generation PLK1 selective ATP competitive inhibitor with apparent antitumor activity in different preclinical models, currently in clinical trials. Polo-like kinase family consists of 5 members (PLK1-PLK5) and they are involved in multiple functions in cell division, including the regulation of centrosome maturation,

checkpoint recovery, spindle assembly, cytokinesis, apoptosis and many others. PLK1 is essential for the maintenance of genomic stability during cell division ("mitosis"). The over-expression of PLK1 can lead to immature cell division followed by aneuploidy and cell death, a hallmark of cancer. PLK1 is over-expressed in a wide variety of leukemias/lymphomas and solid tumor cancers, including acute myeloid leukemia, non-hodgkin lymphoma, prostate, lung, breast, ovarian and adrenocortical carcinoma. In addition, several studies have shown that over-expression of PLK1 is associated with poor prognosis.

Studies have shown that inhibition of polo-like-kinases can lead to tumor cell death, including a Phase 2 study in AML where response rates with a prior PLK inhibitor of up to 31% were observed when used in conjunction with a standard therapy for AML (low-dose cytarabine - "LDAC") versus a 13.3% response rate with LDAC alone. We believe the more selective nature of PCM-075 to PLK1, its 24-hour half-life and oral bioavailability, as well as the reversibility of its on-target hematological toxicities may prove useful in addressing clinical therapeutic needs across a variety of cancers.

PCM-075 has been tested in vivo in different xenograft and transgenic models suggesting tumor growth inhibition or tumor regression when used in combination with other therapies. PCM-075 has been tested for antiproliferative activity on a panel of 148 tumor cell lines and appeared highly active with an IC_{50} (a measure concentration for 50% target inhibition) below 100 nM in 75 cell lines and IC_{50} values below 1 uM in 133 out of 148 cell lines. PCM-075 also appears active in cells expressing multi-drug resistant ("MDR") transporter proteins and we believe PCM-075's apparent ability to overcome the MDR transporter resistance mechanism in cancer cells could prove useful in broader drug combination applications.

In preclinical studies, synergy (interaction of discrete drugs such that the total effect is greater than the sum of the individual effects) has been demonstrated with PCM-075 when used in combination with numerous different chemotherapeutics, including cisplatin, cytarabine, doxorubicin, gemcitabine and paclitaxel, as well as targeted therapies, such as abiraterone acetate (Zytiga®), HDAC inhibitors, such as belinostat (Beleodaq®), Quizartinib (AC220), a development stage FLT3 inhibitor, and bortezomib (Velcade®). These therapeutics are used clinically for the treatment of many leukemias/lymphomas and solid tumor cancers, including AML, NHL, mCRPC, ACC, and TNBC.

We continue to focus on advancing our two active clinical trials with PCM-075. We have achieved a number of key milestones in the first half of 2018 and anticipate achieving the following milestones during the second half of 2018:

Phase 1b/2 Trial of PCM-075 in Combination with Either Low-Dose Cytarabine or Decitabine for the Treatment of Acute Myeloid Leukemia.

Complete Phase 1b dose escalation cohorts and identify the recommended Phase 2 dose ("RP2D") for the Phase 2 continuation trial (dependent upon the number of dose escalation cohorts required to reach the maximum tolerated dose or RP2D of PCM-075).

Provide topline preliminary safety and efficacy data on the combination of PCM-075 + LDAC and the combination of PCM-075 + decitabine in patients treated through the end of 2018.

Present data from the AML trial at the 60^{th} annual American Society of Hematology ("ASH") conference in December 2018.

Initiate the Phase 2 segment of the AML trial, which will enroll 32 patients for continued evaluation of safety and preliminary efficacy of PCM-075 in combination with either LDAC or decitabine (provided the RP2D has been determined in Phase 1b).

Phase 2 trial of PCM-075 in Combination with Abiraterone Acetate (Zytiga®) and Prednisone for the Treatment of Metastatic Castration-Resistant Prostate Cancer.

•

Complete enrollment and cycle 1 of treatment of the 3 safety lead-in patients with PCM-075 at 24 mg/m² in combination with abiraterone acetate (Zytiga®) and prednisone.

Evaluate the three lead-in patients in the mCRPC trial for safety.

Provide topline preliminary safety and efficacy data of PCM-075 in combination with abiraterone acetate (Zytiga®) and prednisone in patients treated through the end of 2018.

During the first half of 2018, we have advanced our business with the following activities:

Announced Preliminary Clinical Data from First Dosing Cohort Demonstrating Durable Treatment Effect of PCM-075 in Combination with Cytarabine or Decitabine in Patients with Relapsed or Refractory AML.

On June 27, 2018, we announced preliminary clinical data from the first dosing cohort showing a treatment effect with PCM-075 in combination with LDAC or decitabine, as measured by decreases in leukemic cells in both peripheral blood and bone marrow in patients in its ongoing Phase 1b/2 trial in relapsed or refractory AML. Both blood and bone marrow samples were obtained from patients with relapsed or refractory AML enrolled in the Phase 1b/2 trial prior to, and at timepoints following administration of PCM-075, in combination with cytarabine or decitabine. Among the 6 patients evaluated, no dose-limiting toxicities were observed that would prohibit further escalation of the PCM-075 dosing. Three patients exhibited substantial reductions in the percentage of both circulating leukemic cells within the blood and leukemic cells within the bone marrow. Two of these three patients continued on treatment in the second cycle and further decreases in circulating leukemic cells in the blood and within the bone marrow were observed. One patient had a decrease in his bone marrow blasts from 96% to 40% at the end of cycle 2 and has continued on treatment in cycle 3.

Announced the Start of Recruitment and Enrollment for Phase 2 Clinical Trial of PCM-075 in Combination with Zytiga® in Patients with mCRPC.

On June 21, 2018, we announced we have received Institutional Review Board approval from Dana-Farber/Harvard Cancer Center and our Phase 2 clinical trial of PCM-075 in combination with Zytiga® (abiraterone acetate) and prednisone in mCRPC is officially activated and recruiting patients. The trial is being conducted by BIDMC, DFCI, and MGH. David Einstein, MD, Genitourinary Oncology Program at BIDMC, is the principal investigator for the trial.

Announced Completion of First Dosing Cohort of Patients Treated with PCM-075 in Combination with Decitabine in Ongoing Phase 1b/2 AML trial.

On June 15, 2018, we announced completion of the first dose cohort of PCM-075 in combination with decitabine in our Phase 1b/2 clinical trial in patients with AML. Three patients were treated with PCM-075 at 12 mg/m², administered orally, once daily, on days 1-5 of the treatment cycle, in combination with decitabine. The combination of PCM-075 and decitabine was well tolerated in all patients. The independent Safety Review Committee ("SRC") has recommended escalating to the second dose cohort of three patients at 18 mg/m² of PCM-075 (approximately a 50% increase) in combination with decitabine.

Announced Completion of First Dosing Cohort of Patients in Ongoing Phase 1b/2 AML trial of PCM-075 in AML.

On May 17, 2018, we announced the completion of the first dose cohort in our Phase 1b/2 clinical trial of PCM-075 in combination with LDAC, in AML. Three patients were treated with PCM-075 at 12 mg/m², administered orally, once daily, on days 1-5 of the treatment cycle, in combination with LDAC. Patients eligible for Phase 1b have relapsed or refractory disease and may have received as many as three prior regimens for treatment of their AML. The combination of PCM-075 and LDAC was well tolerated in all patients. The independent SRC has recommended escalating to the second dose cohort of three patients at PCM-075 at 18 mg/m² (approximately a 50% increase) in combination with LDAC.

Announced Presentation of Data at American Association for Cancer Research ("AACR") Meeting 2018 on Pharmacodynamic and Tumor Biomarkers During Treatment with PCM-075 and Low-Dose Cytarabine.

On April 17, 2018, we announced the presentation of pharmacodynamic and biomarker data from the first patient to complete a safety treatment cycle in our Phase 1b/2 clinical trial of PCM-075 in AML at the AACR annual meeting in Chicago, IL . The poster entitled Pharmacodynamic and Tumor Biomarker Analysis of a PLK1 Inhibitor, PCM-075, in a Phase 1b/2 Trial for Acute Myeloid Leukemia presents the methodology developed to track dynamic changes in blood leukemic cells, genomic alterations and PLK1 inhibition in AML patients treated with PCM-075 in combination with LDAC.

Announced Presentation of data at AACR Meeting 2018 Showing Synergy of PCM-075 in Combination with FLT3 Inhibitors in AML.

On April 16, 2018, we announced the presentation of data showing that PCM-075 exhibits synergistic activity when combined with FLT3 inhibitors in a human xenograft AML model, at the AACR Annual Meeting in Chicago, IL. The poster entitled Selective Polo-like Kinase 1 (PLK1) Inhibitor PCM-075 is Highly Active Alone and Shows Synergy When Combined with FLT3 Inhibitors in Models of Acute Myeloid Leukemia (AML) presents data demonstrating that

PCM-075 in combination with quizartinib (Daiichi-Sankyo) resulted in 97.3% tumor growth inhibition, compared to 77.9% with quizartinib and 80.2% with PCM-075 as monotherapy.

Announced First Patient Successfully Completes Cycle 1 of Treatment with PCM-075 in Combination with Low-Dose Cytarabinein AML Trial.

On March 5, 2018, we announced that the initial patient successfully completed the first cycle 1 of treatment in our Phase 1b/2 multicenter trial of PCM-075 in combination with LDAC in patients with AML. The patient tolerated the combination well and correlative analyses of blood samples, taken at specified time points, also indicated activity on leukemic blood cells. A significant decrease in the percentage of blood leukemic cells was observed within 24 hours of administering PCM-075 + LDAC. By day 15, within the treatment cycle, the greatest effect was observed with blood leukemic cells showing a decrease from greater than 40% to less than 5%. Additionally, the same tumor DNA mutations (ASXL1 and SRSF2) were detected in the bone marrow and blood, indicating consistency across samples and validity of the analyses. Both DNA mutations appeared to quantitatively track with the decrease in blood leukemic cells.

Announced Presentation of Data Showing Synergy of PCM-075 in Combination with Zytiga® (abiraterone acetate) in Castration-Resistant Prostate Cancer Model at 2018 Genitourinary Cancers Symposium.

On February 9, 2018, we announced that preclinical data demonstrating the synergy of PCM-075, our highly-selective PLK1 Inhibitor, in combination with abiraterone acetate (Zytiga® - Johnson & Johnson), will be featured as a Poster Presentation at the 2018 Genitourinary Cancers Symposium on February 9th, in San Francisco, California. The poster entitled Combination of Selective Polo-like Kinase 1 (PLK1) Inhibitor PCM-075 with Abiraterone in Prostate Cancer and Non-Androgen-Driven Cancer Models showcases data from Dr. Michael Yaffe's lab at the Koch Institute for Integrative Cancer Research at Massachusetts Institute of Technology and will be presented by Dr. Jesse Patterson. The underlying mechanism of synergy was further examined by performing gene-expression comparison across more than 30 different synergistic and non-synergistic cell lines across multiple tumor types. From this analysis, multiple hypothesis-generating mechanisms were identified, one of which was the retinoic acid pathway, which when activated is predictive of synergy.

Our accumulated deficit through June 30, 2018 is \$184,251,049. To date, we have generated minimal revenues and expect to incur additional losses to perform further research and development activities.

Our drug development efforts are in their early stages, and we cannot make estimates of the costs or the time that our development efforts will take to complete, or the timing and amount of revenues related to the sale of our drugs. The risk of completion of any program is high because of the many uncertainties involved in developing new drug candidates to market, including the long duration of clinical testing, the specific performance of proposed products under stringent clinical trial protocols, extended regulatory approval and review cycles, our ability to raise additional capital, the nature and timing of research and development expenses, and competing technologies being developed by organizations with significantly greater resources.

Off-Balance Sheet Arrangements

We had no off-balance sheet arrangements as of June 30, 2018.

Critical Accounting Policies

Financial Reporting Release No. 60 requires all companies to include a discussion of critical accounting policies or methods used in the preparation of financial statements. Our accounting policies are described in ITEM 7.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS of our Annual Report on Form 10-K as of and for the year ended December 31, 2017, filed with the SEC on February 26, 2018. There have been no changes to our critical accounting policies other than adoption of ASC 606 since December 31, 2017.

RESULTS OF OPERATIONS

Three Months Ended June 30, 2018 and 2017

Revenues

Our total revenues were \$111,813 and \$102,011 for the three months ended June 30, 2018 and 2017, respectively. The components of our revenues were as follows:

	Three Months Ended June 30,			
	2018	2017	Increase	
	2016	2017	(Decrease)	
Royalties	\$52,423	\$44,810	\$ 7,613	
Diagnostic services	39,345	55,501	(16,156)	
Clinical research services	20,045	1,700	18,345	
Total revenues	\$111.813	\$102,011	\$ 9.802	

The increase in royalty income related primarily to higher receipts of payments in excess of minimum royalties in comparison to the same period of the prior year. Revenue from diagnostic services is recognized when payment is received for the test results. The amount of payments received was lower in 2018 as compared to the same period in the prior year. Revenue from clinical research services consists of revenue from the sale of urine and blood collection supplies and tests performed under agreements with our clinical research and business development partners. Revenue is recognized when control of supplies and/or test results are transferred to customers (upon delivery). There were more sales of clinical research services for the three months ended June 30, 2018 as compared to the same period of 2017.

We expect our royalties to fluctuate as the royalties are sales-based or usage-based royalties on our intellectual property license. Revenue recognition of the royalty depends on the timing and overall sales activities of the licensees. In addition, we expect a decrease in our diagnostic service revenue and clinical research revenue as a result of disposition of our CLIA laboratory and as we focus on the development of oncology therapeutics.

Cost of Revenues

Our total cost of revenues was \$204,436 for the three months ended June 30, 2018, compared to \$338,203 in the same period of 2017. Cost of revenues mainly relates to the costs of our diagnostic service revenues. The costs are recognized at the completion of testing. The decrease in cost of revenues for the three months ended June 30, 2018 compared to the same period of last year is mainly due to the disposition of our CLIA laboratory.

Research and Development Expenses

Research and development expenses consisted of the following:

	Three Months Ended June 30,			
	2018	2017	Increase (Decrease)	
Salaries and staff costs	\$513,331	\$291,195	\$222,136	
Stock-based compensation	111,812	206,463	(94,651))
Outside services, consultants and lab supplies	1,115,009	217,570	897,439	
Facilities	183.327	219,614	(36.287)

Travel and scientific conferences	20,210	28,861	(8,651)
Fees, license and other	9,078	18,012	(8,934)
Total research and development	\$1,952,767	\$981,715	\$971,052	

Research and development expenses increased by \$971,052 to \$1,952,767 for the three months ended June 30, 2018 from \$981,715 for the same period in 2017. The overall increase in research and development expenses was primarily due to the increased outside service costs for clinical studies related to the development of our lead drug candidate, PCM-075. We expect an increase in research and development costs as we complete the development of PCM-075.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consisted of the following:

	Three Months Ended June 30,				
	2018	2017	Increase		
	2016	2017	(Decrease)		
Salaries and staff costs	\$1,109,476	\$755,171	\$354,305		
Board of Directors' fees	121,616	113,501	8,115		
Stock-based compensation	118,631	600,069	(481,438)	
Outside services and consultants	276,543	263,810	12,733		
Legal and accounting fees	125,033	2,325,239	(2,200,206)	
Facilities and insurance	275,975	350,992	(75,017)	
Travel and conferences	44,041	181,016	(136,975)	
Fees, license and other	79,556	84,354	(4,798)	
Total selling, general and administrative	\$2,150,871	\$4,674,152	\$(2,523,281)	

Selling, general and administrative expenses decreased by \$2,523,281 to \$2,150,871 for the three months ended June 30, 2018 from \$4,674,152 for the same period in 2017. The significant components of the decrease were primarily due to the decrease in legal and accounting fees and stock-based compensation. In the second quarter of 2017, we accrued a litigation related loss contingency expense of approximately \$2.1 million for the settlement of complaints with our former CEO and CFO. Stock-based compensation, a non-cash expense, will fluctuate based on the timing and amount of options granted, forfeitures and the fair value of the options at the time of grant or remeasurement. Our selling, general and administrative costs may increase in future periods in order to support fundraising activities and general business activities as we continue to develop and introduce new product offerings.

Restructuring

In May 2018, we closed our CLIA laboratory operations in order to streamline our business model. The loss recognized from disposition of CLIA laboratory was reported as restructuring charges in the June 30, 2018 condensed consolidated financial statements. For the three months ended June 30, 2018, we recorded total restructuring charges of \$243,000 for CLIA laboratory disposal transactions, of which, \$187,000 was related to impairment loss on CLIA laboratory license and \$56,000 was related to loss on disposal of property and equipment and other non-capital assets.

In March 2017, we announced a strategic restructuring plan in connection with the expansion of precision medicine therapeutics to our business. The restructuring plan included a reduction in force and was completed in the last quarter of 2017. The \$3,806 restructuring benefit for the three months ended June 30, 2017 was primarily due to stock-based compensation reversal for certain terminated employees offset by increased employee termination costs.

Net Interest Income (Expense)

Net interest income was \$35,277 for the three months ended June 30, 2018 as compared to \$431,871 net interest expense for the same period of 2017, respectively. The decrease of net interest expense is primarily due to a decrease in interest expense, resulting from pay-off of our \$15.0 million term loan and Equipment Line of Credit.

Change in Fair Value of Derivative Financial Instruments — Warrants

We have issued warrants that are accounted for as derivative liabilities. As of June 30, 2018, the derivative financial instruments—warrants liabilities were revalued to \$67,847, resulting in a decrease in value of \$711,229 from March 31,

2018, based primarily upon the decrease in our stock price as well as the changes in the expected term, volatility, and risk-free interest rates for the expected term. The decrease in value upon remeasurement at June 30, 2018 was recorded as a gain from the change in fair value of derivative financial instruments—warrants in the condensed consolidated statement of operations.

Net Loss

Net loss and per share amounts were as follows:

	Three Months Ended June 30,			
	2018	2017	Increase (Decrease)	
Net loss attributable to common shareholders	\$(6,522,548)	\$(8,051,871)	\$(1,529,323)	
Net loss per common share — basic	\$(0.88)	\$(3.12)	\$(2.24)	
Net loss per common share — diluted	\$(0.88)	\$(3.12)	\$(2.24)	
Weighted average shares outstanding — basic Weighted average shares outstanding — dilute		2,582,645 2,582,645	4,840,818 4,840,818	

The \$1,529,323 decrease in net loss attributable to common shareholders and the \$2.24 decrease in basic net loss per share was primarily the result of a decrease in operating expenses of \$1.4 million for the three months ended June 30, 2018 compared to the same period in the prior year, and a loss on extinguishment of debt of \$1.7 million from the same period of 2017; offset by a one-time, non-cash deemed dividend of \$2.8 million recognized from beneficial conversion features of Series B Convertible Preferred Stock issuance. Basic net loss per share in 2018 was also impacted by the increase in basic weighted average shares outstanding resulting primarily from the sales of approximately 10.9 million shares of common stock through public offerings and direct registered offering and the issuance of approximately 3.2 million shares of common stock upon conversion of Series B Convertible Preferred Stock.

Net loss and per share amounts - Non-GAAP Measures - deemed dividend recognized from beneficial conversion features of Series B Convertible Preferred Stock issuance analysis:

	Three Month	s Ended June 3	0,
	2018	2017	Increase (Decrease)
Net loss attributable to common shareholders	\$(6,522,548)	\$(8,051,871)	\$(1,529,323)
Adjustment for preferred stock dividend recognized from beneficial conversion features of Series B Convertible Preferred Stock issuance	2,769,533	_	2,769,533
Total net loss attributable to common shareholders	\$(3,753,015)	\$(8,051,871)	\$1,240,210
Net loss per common share — basic and diluted	\$(0.44)	\$(3.12)	\$(2.68)
Weighted average shares outstanding — basic and diluted Adjustment for Series B Convertible Preferred Stock Total weighted average shares outstanding — basic and diluted	7,423,463 1,179,670 8,603,133	2,582,645 — 2,582,645	4,840,818 1,179,670 6,020,488

Series B Convertible Preferred Stock was offered to purchasers of the Class A units (common stock) in the June underwritten public offering if, together with the purchase of Class A units, the purchaser, with its affiliates and certain related parties, would beneficially own more than 4.99% of our outstanding stock immediately following the consummation of the offering. The Series B Convertible Preferred Stock serves solely as an ownership blocker. Each share of Series B Convertible Preferred Stock is convertible at the option of the holder into that number of shares of Common Stock determined by dividing the stated value of \$1,000 per share, by the conversion price equal to \$1.00 per share (\$1.00 being the purchase price of each Class A unit). The fair value of the common stock into which the Series B Preferred Stock is convertible exceeded the allocated purchase price fair value of the Series B Convertible

Preferred Stock at the date of issuance. As such, we concluded that the Series B Convertible Preferred Stock contained a beneficial conversion feature and a corresponding accounting entry and financial statement disclosure was required. Because our Series B Convertible Preferred Stock is perpetual with no stated maturity date, and the conversions may occur any time from inception, we immediately recognized the beneficial conversion feature as a one-time, non-cash deemed dividend at issuance. There will be no need to account for any subsequent similar one-time, non-cash dividends for Series B Convertible Preferred Stock issued in the June public offering.

If not for the requirement to account for this one-time, non-cash deemed dividend arising from this conversion feature which solely accommodated purchasers allowing them to not own more than 4.99% of the Common Stock, the net loss per common share — basic and diluted would have been reduced by \$2,769,533 to \$3,753,015 and the weighted average shares outstanding — basic and diluted would have been 8,603,133 (converting the remaining 5,650 shares of Series B Preferred Stock to common stock), and would result in a net loss per share of \$0.44.

Six Months Ended June 30, 2018 and 2017

Revenues

Our total revenues were \$211,949 and \$197,049 for the six months ended June 30, 2018 and 2017, respectively. The components of our revenues were as follows:

	Six Months Ended June 30,			
	2018	2017	Increase (Decrease	e)
Royalties	\$101,478	\$110,636	\$ (9,158)
Diagnostic services	79,347	84,363	(5,016)
Clinical research services	31,124	2,050	29,074	
Total revenues	\$211,949	\$197,049	\$ 14,900	

The overall increase in revenue was mainly a result of increased revenue from clinical research services. Revenue from clinical research services consists of revenue from the sale of urine and blood collection supplies and tests performed under agreements with our clinical research and business development partners. Revenue is recognized when control of supplies and/or test results are transferred to customers (upon delivery).

We expect our royalties to fluctuate as the royalties are sales-based or usage-based royalties on our intellectual property license. Revenue recognition of the royalty depends on the timing and overall sales activities of the licensees. In addition, we expect a decrease in our diagnostic service revenue and clinical research revenue as a result of disposition of our CLIA laboratory and as we focus on the development of oncology therapeutics.

Cost of Revenues

Our total cost of revenues was \$570,780 for the six months ended June 30, 2018, compared to \$954,629 in the same period of 2017. Cost of revenues mainly relates to the costs of our diagnostic service revenues. The costs are recognized at the completion of testing. The decrease in cost of revenues for the six months ended June 30, 2018 compared to the same period of last year is mainly due to the lower volume of tests processed and the disposition of the CLIA laboratory.

Research and Development Expenses

Research and development expenses consisted of the following:

	Six Months Ended June 30,			
	2018	2017	Increase (Decrease)	
Salaries and staff costs	\$915,399	\$1,166,572	\$(251,173)
Stock-based compensation	507,521	578,663	(71,142)
Outside services, consultants and lab supplies	1,964,997	852,364	1,112,633	
Facilities	374,718	587,515	(212,797)

Travel and scientific conferences	59,428	44,901	14,527
Fees, licenses and other	14,542	2,031,530	(2,016,988)
Total research and development	\$3,836,605	\$5,261,545	\$(1,424,940)

Research and development expenses decreased by \$1,424,940 to \$3,836,605 for the six months ended June 30, 2018 from \$5,261,545 for the same period in 2017. Our costs have decreased primarily due to the decrease in fees, licenses and other, offset by the increase in outside services, consultants and lab supplies costs. The decrease in fees, license and other was

primarily due to the \$2.0 million license fee payment in March 2017 to Nerviano for development and commercialization rights to PCM-075. The increase in services, consultants and lab supplies costs was mainly due to the clinical studies related to the development of PCM-075. We expect increase in research and development expenses as we continue the development of our lead drug candidate.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consisted of the following:

	Six Months Ended June 30,				
	2018	2017	Increase		
	2016	2017	(Decrease)		
Salaries and staff costs	\$1,799,646	\$2,176,764	\$(377,118)	
Board of Directors' fees	249,944	227,120	22,824		
Stock-based compensation	1,089,422	1,201,378	(111,956)	
Outside services and consultants	467,605	607,430	(139,825)	
Legal and accounting fees	288,053	2,785,921	(2,497,868)	
Facilities and insurance	531,028	620,330	(89,302)	
Travel and conferences	100,498	464,949	(364,451)	
Fees, license and other	129,652	194,884	(65,232)	
Total selling, general and administrative	\$4,655,848	\$8,278,776	\$(3,622,928)	

Selling, general and administrative expenses decreased by \$3,622,928 to \$4,655,848 for the six months ended June 30, 2018 from \$8,278,776 for the same period in 2017. The overall decrease in selling, general and administrative expenses was primarily due to the decrease in legal fees and the reduction in force. Legal fees decreased primarily as a result of a litigation related loss contingency accrual of \$2.1 million during the six months ended June 30, 2017. As part of our restructuring in 2017, we reduced the number of our selling, general and administrative personnel, bringing down our average headcount to nine from fifteen in the same period of the prior year.

Restructuring

In May 2018, we closed our CLIA laboratory operations in order to streamline our business model. The loss recognized from disposition of CLIA laboratory was reported as restructuring charges in the June 30, 2018 condensed consolidated financial statements. For the six months ended June 30, 2018, we recorded total restructuring charges of \$243,000 for CLIA laboratory disposal transactions, of which, \$187,000 was related to impairment loss on CLIA laboratory license and \$56,000 was related to loss on disposal of property and equipment and other non-capital assets.

In March 2017, we announced a strategic restructuring plan in connection with the addition of precision medicine therapeutics to our business. The restructuring plan included a reduction in force and was completed in the last quarter of 2017. Restructuring charges of approximately \$1.7 million were incurred and have been included as a component of operating loss for the six months ended June 30, 2017. Of the total restructuring charges, approximately \$1.2 million was related to termination of employees and an approximately \$0.5 million charge related to impaired license fees.

Net Interest Income (Expense)

Net interest income was \$32,812 for six months ended June 30, 2018, compared to \$861,268 net interest expense for the same period of 2017. The decrease of net interest expense is primarily due to a decrease in interest expense of approximately \$948,000, resulting from pay-off of our \$15.0 million term loan and Equipment Line of Credit.

Change in Fair Value of Derivative Financial Instruments — Warrants

We have issued warrants that are accounted for as derivative liabilities. As of June 30, 2018, the derivative financial instruments—warrants liabilities were revalued to \$67,847, resulting in a decrease in value of \$581,540 from December 31, 2017, based primarily upon the decrease in our stock price as well as the changes in the expected term, volatility, and risk-free interest rates for the expected term. The decrease in value was recorded as a gain from the change in fair value of derivative financial instruments—warrants in the condensed consolidated statement of operations.

Net Loss

Net loss and per share amounts were as follows:

	Six Months En		
	2018	2017	Increase (Decrease)
Net loss attributable to common shareholders	\$(11,314,785)	\$(18,057,468)	\$(6,742,683)
Net loss per common share — basic	\$(1.88)	\$(7.00)	\$(5.12)
Net loss per common share — diluted	\$(1.88)	\$(7.00)	\$(5.12)
Weighted average shares outstanding — basic Weighted average shares outstanding — dilute		2,581,372 2,581,372	3,444,973 3,444,973

The \$6,742,683 decrease in net loss attributable to common shareholders and the \$5.12 decrease in basic net loss per share was primarily the result of a decrease in operating expenses compared to the same period in the prior year, offset by a one-time, non-cash deemed dividend recognized from beneficial conversion features of Series B Convertible Preferred Stock issuance. Basic net loss per share in 2018 was also impacted by the increase in basic weighted average shares outstanding resulting primarily from the sales of approximately 10.9 million shares of common stock through public offerings and direct registered offering and the issuance of approximately 3.2 million shares of common stock upon conversion of Series B Convertible Preferred Stock.

Net loss and per share amounts - Non-GAAP Measures - deemed dividend recognized from beneficial conversion features of Series B Convertible Preferred Stock issuance analysis:

	Six Months Er	ided June 30,	
	2018	2017	Increase (Decrease)
Net loss attributable to common shareholders	\$(11,314,785)	\$(18,057,468)	\$(6,742,683)
Adjustment for preferred stock dividend recognized from beneficial conversion features of Series B Convertible Preferred Stock issuance	2,769,533	_	2,769,533
Total net loss attributable to common shareholders	\$(8,545,252)	\$(18,057,468)	\$(3,973,150)
Net loss per common share — basic and diluted	\$(1.29)	\$(7.00)	\$(5.71)
Weighted average shares outstanding — basic and diluted Adjustment for Series B Convertible Preferred Stock Total weighted average shares outstanding — basic and diluted	6,026,345 593,094 6,619,439	2,581,372 — 2,581,372	3,444,973 593,094 4,038,067

Series B Convertible Preferred Stock was offered to purchasers of the Class A units (common stock) in the June underwritten public offering if, together with the purchase of Class A units, the purchaser, with its affiliates and certain related parties, would beneficially own more than 4.99% of our outstanding stock immediately following the consummation of the offering. The Series B Convertible Preferred Stock serves solely as an ownership blocker. Each share of Series B Convertible Preferred Stock is convertible at the option of the holder into that number of shares of Common Stock determined by dividing the stated value of \$1,000 per share, by the conversion price equal to \$1.00 per share (\$1.00 being the purchase price of each Class A unit). The fair value of the common stock into which the Series B Preferred Stock is convertible exceeded the allocated purchase price fair value of the Series B Convertible Preferred Stock at the date of issuance. As such, we concluded that the Series B Convertible Preferred Stock contained

a beneficial conversion feature and a corresponding accounting entry and financial statement disclosure was required. Because our Series B Convertible Preferred Stock is perpetual with no stated maturity date, and the conversions may occur any time from inception, we immediately recognized the beneficial conversion feature as a one-time, non-cash deemed dividend at issuance. There will be no need to account for any subsequent similar one-time, non-cash dividends for Series B Convertible Preferred Stock issued in the June public offering.

If not for the requirement to account for this one-time, non-cash deemed dividend arising from this conversion feature which solely accommodated purchasers allowing them to not own more than 4.99% of the Common Stock, the net loss per common share — basic and diluted would have been reduced by \$2,769,533 to \$8,545,252 and the weighted average shares outstanding — basic and diluted would have been \$6,619,439 (converting the remaining 5,650 shares of Series B Preferred Stock to common stock), and would result in a net loss per share of \$1.29.

LIQUIDITY AND CAPITAL RESOURCES

As of June 30, 2018, we had \$18,485,950 in cash and cash equivalents. Net cash used in operating activities for the six months ended June 30, 2018 was \$6,106,754, compared to \$13,355,334 for the six months ended June 30, 2017. Our use of cash was primarily a result of the net loss of \$8,533,132 for the six months ended June 30, 2018, adjusted for non-cash items related to stock-based compensation of \$1,627,431, gain on extinguishment of debt of \$17,974, impairment loss of \$187,500, depreciation and amortization of \$483,495, and the gain from the change in fair value of derivative financial instruments—warrants of \$581,540. The changes in our operating assets and liabilities consisted of higher accounts payable and accrued expenses, an increase in other asset, and a decrease in accounts receivable and unbilled receivable and prepaid expenses. At our current and anticipated level of operating loss, we expect to continue to incur an operating cash outflow for the next several years.

Net cash used in investing activities was \$36,600 during the six months ended June 30, 2018, compared to \$24,041,048 provided by investing activities for the same period in 2017. Investing activities during the six months ended June 30, 2018 consisted of purchase of short-term investments of \$31,500 and net purchases for capital equipment of \$5,100, while investing activities during the six months ended June 30, 2017 consisted primarily of net sales and maturities of short-term investments of \$24,061,786.

Net cash provided in financing activities was \$16,403,540 during the six months ended June 30, 2018, compared to \$16,819,328 used in financing activities for the same period in 2017. Financing activities during the six months ended June 30, 2018 related primarily to sales of Common Stock and Series B Convertible Preferred Stock and proceeds from exercise of warrants, offset by the pay-off of our Equipment Line of Credit. Financing activities during the same period of the prior year consisted primarily of the pay-off of term loan.

As of June 30, 2018, and December 31, 2017, we had working capital of \$16,425,028 and \$5,522,917, respectively.

On July 30, 2018, we entered into a Severance Agreement and Mutual Release with William Welch, our former Chief Executive Officer, specifying the terms of Mr. Welch's termination of service with us. Pursuant to the Agreement, Mr. Welch will be paid a lump sum of \$350,000 less applicable federal, state and local tax withholdings on the eighth day after execution of the Agreement. The severance payment amount has been accrued within the condensed consolidated balance sheet as of June 30, 2018. The Agreement contains mutual releases on behalf of Mr. Welch and us.

Based on our current business plan and assumptions, we expect to continue to incur significant losses and require significant additional capital to further advance our clinical trial programs and support our other operations. Considering our current cash resources, we believe our existing resources will be sufficient to fund our planned operations through June 2019. In addition, we have based our cash sufficiency estimates on our current business plan and assumptions that may prove to be wrong. We could utilize our available capital resources sooner than we currently expect, and we could need additional funding to sustain our operations even sooner than currently anticipated. These circumstances raise substantial doubt about our ability to continue as a going concern.

Our working capital requirements will depend upon numerous factors including but not limited to the nature, cost and timing of our research and development programs. To date, our sources of cash have been primarily limited to the sale of equity securities. We cannot be certain that additional funding will be available on acceptable terms, or at all. To

the extent that we raise additional funds by issuing equity securities, our stockholders may experience significant dilution. If we are unable to raise additional capital when required or on acceptable terms, we may have to significantly delay, scale back or discontinue the development and/or commercialization of one or more product candidates, all of which may have a material adverse impact on our operations. We may also be required to (i) seek collaborators for product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; or (ii) relinquish or otherwise dispose of rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves on unfavorable terms. We are evaluating all options to raise additional capital, increase revenue, as well as reduce costs, in an effort to strengthen our liquidity position, which may include the following: (1) Raising capital through public and private equity offerings; (2) Introducing operation and business development initiatives to bring in new revenue streams; (3) Reducing

Table of Contents

operating costs by identifying internal synergies; (4) Engaging in strategic partnerships. We continually assess our spending plans to effectively and efficiently address our liquidity needs.

NASDAQ Notice

On September 5, 2017, we received a written notice from the NASDAQ that we were not in compliance with NASDAQ Listing Rule 5550(a)(2) for continued listing on the NASDAQ Capital Market, as the minimum bid price of our common stock had been below \$1.00 per share for 30 consecutive business days. The Notice had no immediate effect on the listing of our common stock, and our common stock continue to trade on the NASDAQ Capital Market under the symbol "TROV". In accordance with NASDAQ Listing Rule 5810(c)(3)(A), we had until March 5, 2018, to regain compliance with the minimum bid price requirement.

On March 6, 2018, the NASDAQ Capital Market informed the Company that it was eligible for an additional 180 calendar day period until September 4, 2018 to regain compliance with the minimum \$1.00 bid price per share requirement. To regain compliance, the closing bid price of our common stock must meet or exceed \$1.00 per share for at least ten consecutive business days during this 180 calendar day period.

CONTRACTUAL OBLIGATIONS

For a discussion of our contractual obligations see (i) our Financial Statements and Notes to Consolidated Financial Statements Note 9. Commitments and Contingencies, and (ii) Item 7 Management Discussion and Analysis of Financial Condition and Results of Operations — Contractual Obligations and Commitments, included in our Annual Report on Form 10-K as of December 31, 2017.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our cash and cash equivalent primary consists of deposits and money market deposits managed by commercial banks as of June 30, 2018. The goals of our investment policy are preservation of capital, fulfillment of liquidity needs and fiduciary control of cash and investments.

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of interest rates, particularly because our investments are in short-term money marketable funds. Due to the short-term duration of our investment portfolio and the relatively low risk profile of our investments, a sudden change in interest rates would not have a material effect on the fair market value of our portfolio, nor our operating results or cash flows.

We do not believe our cash and cash equivalents have significant risk of default issues; however, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits. Given the current stability of financial institutions, we believe that we will not experience losses on these deposits.

Foreign Currency Risk

We face the foreign currency risk as a result of entering into transactions denominated in currencies other than U.S. dollars. Changes in foreign currency exchange rates can create foreign exchange gains or losses to us.

Effects of Inflation

We do not believe that inflation and changing prices during the six months ended June 30, 2018 had a significant impact on our results of operations.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We have performed an evaluation under the supervision and with the participation of our management, including our principal executive and financial officer, of the effectiveness of our disclosure controls and procedures, as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"). Based on that evaluation, our principal

Table of Contents

executive and financial officer concluded that our disclosure controls and procedures were effective as of June 30, 2018 to provide reasonable assurance that information required to be disclosed by us in the reports filed or submitted by us under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives as specified above. Management does not expect, however, that our disclosure controls and procedures will prevent or detect all errors and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting during the three months ended June 30, 2018 that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 8 to the unaudited Condensed Consolidated Financial Statements for a summary of legal proceedings.

ITEM 1A. RISK FACTORS

There have been no material changes from the risk factors disclosed in our Form 10-K for the year ended December 31, 2017 and Form 10-Q for the period ended March 31, 2018.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

Exhibit Number

Description of Exhibit

- 4.1 Confidential Severance Agreement and Mutual Release, dated July 30, 2018, by and between the Company and William Welch
- 21.1 Certification of Principal Executive Officer and Principal Financial Officer required by Rule 13a-14(a)/15d-14(a) under the Exchange Act.
- 22.1 Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101.INS XBRL Instance Document

101.SCH XBRL Taxonomy Extension Schema

101.CAL XBRL Taxonomy Extension Calculation Linkbase

101.LAB XBRL Taxonomy Extension Labels Linkbase

101.PRE XBRL Taxonomy Extension Presentation Linkbase

101.DEF XBRL Taxonomy Extension Definition Linkbase

Table of Contents

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.

TROVAGENE, INC.

August 3, 2018 By:/s/ Thomas Adams

Thomas Adams

Interim Chief Executive Officer (Principal Executive Officer and Principal Financial Officer)