BIOCEPT INC

FORM 10-Q
(Quarterly Report)

Filed 08/14/17 for the Period Ending 06/30/17

Address	5810 NANCY RIDGE DR
	SAN DIEGO, CA 92121
Telephone	858-320-8200
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SIC Code	8071 - Medical Laboratories
Industry	Medical Equipment, Supplies & Distribution
Sector	Healthcare
Fiscal Year	12/31

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

FORM 10-Q

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

For the quarterly period ended June 30, 2017

OR

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

For the transition period from _____to _____.

Commission file number: 001-36284

Biocept, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**80-0943522**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

5810 Nancy Ridge Drive, San Diego, California
(Address of principal executive offices)

92121
(Zip Code)

(858) 320-8200
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the 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	☐	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☒
		Emerging growth company	☒

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. ☐

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

As of August 10, 2017, there were 30,253,743 shares of the Registrant's common stock outstanding.

BIOCEPT, INC.
FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED
June 30, 2017

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I MPORTANT NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, or Quarterly Report, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements included or incorporated by reference in this Quarterly Report other than statements of historical fact, are forward-looking statements. You can identify these and other forward-looking statements by the use of words such as "may," "will," "could," "anticipate," "expect," "intend," "believe," "continue" or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to such statements.

Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in our other filings with the Securities and Exchange Commission, or the SEC. Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for us to predict all risk factors and uncertainties, 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. Readers are cautioned not to place undue reliance on forward-looking statements. The forward-looking statements speak only as of the date on which they are made and we undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they are made except as required by law. Readers should, however, review the factors and risks we describe in the reports and registration statements we file from time to time with the SEC.

P ART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Biocept, Inc.

Condensed Balance Sheets

	December 31, 2016	June 30, 2017 (unaudited)
Current assets:		
Cash	$ 4,609,332	$ 10,000,155
Accounts receivable, net	128,969	994,746
Inventories, net	549,045	631,210
Prepaid expenses and other current assets	484,649	624,827
Total current assets	5,771,995	12,250,938
Fixed assets, net	1,806,331	2,402,255
Total assets	$ 7,578,326	$ 14,653,193
Current liabilities:		
Accounts payable	$ 960,486	$ 1,777,409
Accrued liabilities	1,160,036	1,387,767
Supplier financings	75,691	240,913
Current portion of equipment financings	262,674	362,777
Current portion of credit facility, net	1,934,665	1,980,550
Total current liabilities	4,393,552	5,749,416
Non-current portion of equipment financings	778,643	794,320
Non-current portion of credit facility, net	1,123,001	135,848
Non-current portion of interest payable	227,177	298,093
Non-current portion of deferred rent	397,292	333,259
Total liabilities	6,919,665	7,310,936
Commitments and contingencies (see Note 11)		
Shareholders' equity:		
Preferred stock, $0.0001 par value, 5,000,000 authorized; no shares issued and outstanding at December 31, 2016 and June 30, 2017.	—	—
Common stock, $0.0001 par value, 150,000,000 authorized; 17,499,397 issued and outstanding at December 31, 2016; 28,697,078 issued and outstanding at June 30, 2017.	1,750	2,870
Additional paid-in capital	174,292,781	191,101,115
Accumulated deficit	(173,635,870)	(183,761,728)
Total shareholders' equity	658,661	7,342,257
Total liabilities and shareholders' equity	$ 7,578,326	$ 14,653,193

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

Biocept, Inc.

Condensed Statements of Operations and Comprehensive Loss

(Unaudited)

	For the three months ended June 30,		For the six months ended June 30,	
	2016	2017	2016	2017
Net revenues	$ 662,860	$ 1,278,961	$ 884,229	$ 2,962,026
Costs and expenses:				
Cost of revenues	1,669,571	2,368,705	3,144,361	4,498,159
Research and development expenses	716,279	841,991	1,444,355	1,599,249
General and administrative expenses	1,517,664	1,798,026	3,004,888	3,704,661
Sales and marketing expenses	1,291,709	1,746,867	2,596,608	3,025,178
Total costs and expenses	5,195,223	6,755,589	10,190,212	12,827,247
Loss from operations	(4,532,363)	(5,476,628)	(9,305,983)	(9,865,221)
Other income/ (expense):				
Interest expense	(99,720)	(214,377)	(238,160)	(296,903)
Other income	38,412	—	76,824	38,412
Total other income/ (expense):	(61,308)	(214,377)	(161,336)	(258,491)
Loss before income taxes	(4,593,671)	(5,691,005)	(9,467,319)	(10,123,712)
Income tax expense	(503)	(2,146)	(2,053)	(2,146)
Net loss and comprehensive loss	$ (4,594,174)	$ (5,693,151)	$ (9,469,372)	$(10,125,858)
Weighted-average shares outstanding used in computing net loss per share attributable to common shareholders:				
Basic	7,702,286	26,778,549	7,134,639	23,889,888
Diluted	7,702,286	26,778,549	7,134,639	23,889,888
Net loss per common share:				
Basic	$ (0.60)	$ (0.21)	$ (1.33)	$ (0.42)
Diluted	$ (0.60)	$ (0.21)	$ (1.33)	$ (0.42)

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

Biocept, Inc.

Condensed Statements of Cash Flows

(Unaudited)

	For the six months ended June 30,	
	2016	2017
Cash Flows from Operating Activities		
Net loss	$ (9,469,372)	$ (10,125,858)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	157,979	226,015
Inventory reserve	(37,662)	(28,997)
Stock-based compensation	699,710	756,461
Non-cash interest expense related to credit facility and other financing activities	32,919	6,886
Increase/ (decrease) in cash resulting from changes in:		
Accounts receivable, net	(52,453)	(865,777)
Inventory	(109,114)	(53,168)
Prepaid expenses and other current assets	264,071	219,444
Accounts payable	362,648	665,882
Accrued liabilities	(163,377)	204,760
Accrued interest	36,087	81,960
Deferred rent	(15,226)	(34,762)
Net cash used in operating activities	(8,293,790)	(8,947,154)
Cash Flows from Investing Activities:		
Purchases of fixed assets	(323,923)	(527,431)
Net cash used in investing activities	(323,923)	(527,431)
Cash Flows from Financing Activities:		
Net proceeds from issuance of common stock and warrants	4,657,525	8,559,958
Proceeds from exercise of common stock warrants	—	7,493,035
Payments on equipment financings	(49,061)	(45,012)
Payments on supplier and other third-party financings	(282,207)	(194,400)
Payments on credit facility	(778,303)	(948,173)
Net cash provided by financing activities	3,547,954	14,865,408
Net increase/ (decrease) in Cash	(5,069,759)	5,390,823
Cash at Beginning of Period	8,821,329	4,609,332
Cash at End of Period	$ 3,751,570	$ 10,000,155
Supplemental Disclosures of Cash Flow Information:		
Cash paid during the period for:		
Interest	$ 187,319	$ 225,207
Income taxes	$ 2,053	$ 2,146

Non-cash Investing and Financing Activities:

A public offering of Biocept, Inc.'s, or the Company's, common stock and warrants to purchase its common stock closed on May 4, 2016 (see Note 3). In connection with the closing of this offering, warrants were issued to purchase up to an aggregate of 1,163,526 shares of common stock at an exercise price of $3.90 per share with a term of five years and an estimated grant date fair value of approximately $2.0 million, which was recorded as an offset to additional paid-in capital.

During the six months ended June 30, 2016 and 2017, the Company financed insurance premiums of $434,475 and $359,622, respectively, through third-party financings.

Fixed assets purchased totaling $445,386 and $165,516 during the six months ended June 30, 2016 and 2017, respectively, were recorded as equipment financing obligations and were excluded from cash purchases in the Company's unaudited condensed statements of cash flows. During the six months ended June 30, 2016, fixed assets with an aggregate net book value of $270,377,

which had previously been recorded as equipment financings with remaining outstanding balances owed totaling $239,994, were effectively disposed of and replaced with upgraded equipment recorded as equipment financings.

The amount of unpaid fixed asset purchases excluded from cash purchases in the Company's unaudited condensed statements of cash flows decreased from $64,300 at December 31, 2015 to $14,032 at June 30, 2016, and increased from $58,066 at December 31, 2016 to $209,107 at June 30, 2017.

An offering of the Company's common stock and warrants to purchase its common stock occurred on March 31, 2017 (see Note 3). In the offering, warrants were issued to buy (in the aggregate) up to 2,160,000 shares of common stock at an exercise price of $2.50 per share with a term of five years and an estimated grant date fair value of approximately $2.8 million, which was recorded as an offset to additional paid-in capital (see Note 4). Additionally, approximately $728,000 of fees and costs directly associated with the offering were recorded as an offset to additional paid-in capital within common stock issuance costs in accordance with applicable accounting guidance.

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

1. The Company, Business Activities and Basis of Presentation

The Company and Business Activities

The Company was founded in California in May 1997 and is an early stage molecular oncology diagnostics company that develops and commercializes proprietary circulating tumor cell, or CTC, and circulating tumor DNA, or ctDNA, assays utilizing a standard blood sample. The Company's current and planned assays are intended to provide information to aid healthcare providers to identify specific oncogenic alterations that may qualify a subset of cancer patients for targeted therapy at diagnosis, progression or for monitoring in order to identify specific resistance mechanisms. Often, traditional methodologies such as tissue biopsies are insufficient or unavailable to provide the molecular subtype information necessary for clinical decisions. The Company's assays have the potential to provide more contemporaneous information on the characteristics of a patient's disease compared with traditional methodologies such as tissue biopsy and radiographic imaging. Additionally, the Company's proprietary blood collection tubes, which allow for the intact transport of research use only liquid biopsy samples from regions around the world, are anticipated to be sold to laboratory supply distributor(s) commencing in the six months ending December 31, 2017.

The Company operates a clinical laboratory that is CLIA-certified (under the Clinical Laboratory Improvement Amendment of 1988) and CAP-accredited (by the College of American Pathologists), and manufactures cell enrichment and extraction microfluidic channels, related equipment and certain reagents to perform the Company's diagnostic assays in a facility located in San Diego, California. CLIA certification and accreditation are required before any clinical laboratory may perform testing on human specimens for the purpose of obtaining information for the diagnosis, prevention, treatment of disease, or assessment of health. The assays the Company offers are classified as laboratory developed tests under the CLIA regulations.

In July 2013, the Company effected a reincorporation to Delaware by merging itself with and into Biocept, Inc., a Delaware corporation, which had been formed to be and was a wholly-owned subsidiary of the Company since July 23, 2013.

Basis of Presentation

The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America.

The unaudited condensed financial statements included in this Form 10-Q have been prepared in accordance with the U.S. Securities and Exchange Commission, or SEC, instructions for Quarterly Reports on Form 10-Q. Accordingly, the condensed financial statements are unaudited and do not contain all the information required by U.S. Generally Accepted Accounting Principles, or GAAP, to be included in a full set of financial statements. The balance sheet at December 31, 2016 has been derived from the audited financial statements at that date but does not include all of the information and footnotes required by GAAP for a complete set of financial statements. The audited financial statements for the year ended December 31, 2016, filed with the SEC with our Annual Report on Form 10-K on March 28, 2017 include a summary of our significant accounting policies and should be read in conjunction with this Form 10-Q. In the opinion of management, all material adjustments necessary to present fairly the results of operations for such periods have been included in this Form 10-Q. All such adjustments are of a normal recurring nature. The results of operations for interim periods are not necessarily indicative of the results of operations for the entire year.

Reverse Stock Split

On September 27, 2016, the Company's stockholders approved, and the Company filed, an amendment to the Company's amended and restated certificate of incorporation to effect a one-for-three reverse stock split of the Company's outstanding common stock, and to increase the authorized number of shares of the Company's common stock from 40,000,000 to 150,000,000 shares. The one-for-three reverse stock split was effected September 29, 2016 . As such, all references to share and per share amounts in the unaudited condensed financial statements and accompanying notes to the unaudited condensed financial statements have been retroactively restated to reflect the one-for-three reverse stock split, except for the authorized number of shares of the Company's common stock of 150,000,000 shares, which was not affected by the one-for-three reverse stock split.

Revenue Recognition and Related Reserves

The Company's commercial revenues are generated from diagnostic services provided to physicians and billed to third-party insurance payers such as managed care organizations, Medicare and Medicaid and patients for any deductibles, coinsurance or copayments that may be due. The Company recognizes revenue in accordance with the provision of ASC 954-605, Health Care Entities—Revenue Recognition, which requires that four basic criteria must be met prior to recognition of revenue: (1) persuasive evidence of an

arrangement exists; (2) delivery has occurred and title and the risks and rewards of ownership have been transferred to the client or services have been rendered; (3) the price is fixed or determinable; and (4) collectability is reasonably assured. Commencing on March 31, 2017, the Company recognizes commercial revenue related to billings for assays delivered and billed to Medicare and other third-party payers on an accrual basis when amounts that will ultimately be realized can be estimate d upon delivery, whereby prior to March 31, 2017, the Company recognized revenues for its commercial diagnostic services on a cash basis as collected because the amounts ultimately expected to be received could not be estimated upon delivery due to insuffi cient collection history experience.

The Company bills third-party payers on a fee-for-service basis at the Company's list price and third-party commercial revenue is recorded net of contractual discounts, payer-specific allowances and other reserves. The Company's development services revenues are supported by contractual agreements and generated from assay development services provided to entities, as well as certain other diagnostic services provided to physicians. Diagnostic services are completed upon the delivery of assay results to the prescribing physician, at which time the Company bills for the service.

The Company's gross commercial revenues billed are subject to estimated deductions for such contractual discounts, payer-specific allowances and other reserves to arrive at reported net revenues, which relate to differences between amounts billed and corresponding amounts estimated to be subsequently collected. These third-party payer discounts and sales allowances are estimated based on a number of assumptions and factors, including historical payment trends, seasonality associated with the annual reset of patient deductible limits on January 1 of each year, and current and estimated future payments. Specifically, the Company maintains four such reserves: the reserve for contractual discounts, the reserve for aged non-patient receivables, the reserve for estimated patient receivables, and the reserve for other payer-specific sales allowances. The reserve for contractual discounts relates to discounts to gross amounts billed to Medicare and contracted third-party payers to arrive at the deemed "allowed expense" amount covered by that payer. The Company's contracted third-party commercial sales are recorded using an actual or contracted fee schedule at the time of sale, while estimated fee schedules are maintained for each non-contracted payer separately as part of other payer-specific sales allowances. Contractual discounts are recorded at the transaction level at the time of sale based on a fee schedule that is maintained for each contracted third-party payer. The Company periodically adjusts fee schedules for both contracted and non-contracted third-party payers based upon historical payment trends. The reserve for aged non-patient receivables reduces gross amounts billed to non-contracted third-party payers for amounts estimated to be collected according to the age of the outstanding balance. The reserve for estimated patient receivables reduces gross amounts billed to third-party payers for amounts estimated to be collected directly from individual patients, such as copayments, deductibles, or amounts otherwise designated as patient responsibility. The reserve for other payer-specific sales allowances relates to the amounts billed to non-contracted third-party payers that are estimated to not be covered by that specific payer's coverage policies, as well as estimated necessary adjustments to gross amounts billed based on historical collection experience for a particular third-party payer unrelated to the age of outstanding balances.

The estimates of amounts that will ultimately be realized from commercial diagnostic services require significant judgment by management. Patients do not enter into direct agreements with the Company that commit them to pay any portion of the cost of the tests in the event that they have not met their annual deductible limit under their insurance policy, if any, or if their insurance otherwise declines to reimburse the Company. Adjustments to the estimated payment amounts are recorded at the time of final collection and settlement of each transaction as an adjustment to commercial revenue. The estimation process used to determine third-party payer discounts and sales allowance has been applied on a consistent basis since March 31, 2017, and no subsequent significant adjustments have been necessary to increase or decrease these discounts and allowances as a result of changes in underlying estimates.

The composition of the Company's gross and net revenues recognized during the three and six-months ended June 30, 2016 and 2017 is as follows:

	For the three months ended June 30,		For the six months ended June 30,	
	2016	2017	2016	2017
Commercial revenues recognized upon delivery	$ —	$ 3,970,630	$ —	$ 8,696,596
Development services revenues recognized upon delivery	66,481	83,553	98,329	144,342
Commercial revenues recognized upon cash collection	596,379	159,457	785,900	1,056,043
Total gross revenues	662,860	4,213,640	884,229	9,896,981
Provisions for contractual discounts	—	(1,489,527)	—	(2,815,323)
Provisions for aged non-patient receivables	—	(129,091)	—	(445,643)
Provisions for estimated patient receivables	—	(15,500)	—	(118,840)
Provisions for other payer-specific sales allowances	—	(1,300,561)	—	(3,555,149)
Net revenues	$ 662,860	$ 1,278,961	$ 884,229	$ 2,962,026

The amount of nonrecurring net revenue recorded during the three and six-months ended June 30, 2017, had the Company commenced recognizing revenue for commercial diagnostic services upon delivery on or prior to December 31, 2016 instead of on March 31, 2017, was $134,915 and $1,012,242, respectively, and the corresponding decrease in net loss per common share was $0.01

and $0.04, respectively. The incremental net revenue and d ecrease in loss from operations as a result of recognizing revenue on an accrual basis commencing on March 31, 2017, or the total amount of net revenue recorded in excess of the amount of commercial cash collections, was $191,193 and $916,883 during the th ree and six-months ended June 30, 2017, respectively, and the corresponding decrease in net loss per common share was $0.01 and $0.04, respectively.

A summary of activity in the Company's gross and net accounts receivable balances, as well as corresponding reserves, during the six months ended June 30, 2017 is as follows:

	Balance at December 31, 2016	Amounts Recognized Upon Delivery	Settlements Upon Adjudication	Balance at June 30, 2017
Accounts receivable, gross	$ 128,969	$ 8,840,938	$ (2,773,573)	$ 6,196,334
Reserve for contractual discounts	—	(2,815,323)	956,314	(1,859,009)
Reserve for aged non-patient receivables	—	(445,643)	14,270	(431,373)
Reserve for estimated patient receivables	—	(118,840)	13,741	(105,099)
Reserve for other payer-specific sales allowances	—	(3,555,149)	749,042	(2,806,107)
Accounts receivable, net	$ 128,969	$ 1,905,983	$ (1,040,206)	$ 994,746

Concentration of Risk

Concentrations of credit risk with respect to revenues are primarily limited to geographies to which the Company provides a significant volume of its services, and to specific third-party payers of the Company's services such as Medicare, insurance companies, and other third-party payers. The Company's client base consists of a large number of geographically dispersed clients diversified across various customer types.

The Company's third-party payers that represent more than 10% of total net revenues in any period presented, and their related net revenue amount as a percentage of total net revenues, during the three and six-months ended June 30, 2016 and 2017 were as follows:

	For the three months ended June 30,		For the six months ended June 30,	
	2016	2017	2016	2017
Medicare and Medicare Advantage	47%	45%	44%	39%
Blue Cross Blue Shield	8%	15%	9%	18%
United Healthcare	18%	9%	18%	11%

The Company's third-party payers that represent more than 10% of total net accounts receivable, and their related net accounts receivable balance as a percentage of total net accounts receivable, at June 30, 2017 were as follows:

Medicare and Medicare Advantage	26%
Blue Cross Blue Shield	24%
United Healthcare	12%

Recent Accounting Pronouncements

In May 2014, and as subsequently updated and amended from time to time, the Financial Accounting Standards Board, or the FASB, issued authoritative guidance that requires entities to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. This proposed guidance has been deferred and would be effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, and may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. Earlier application is permitted only as of annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. As the Company has not yet completed its final review of the impact of the new guidance but expects to during 2017, the Company has not determined whether the adoption of this guidance will have a material impact on its financial statements or disclosures. The Company is still evaluating disclosure requirements under the new guidance, and will continue to evaluate additional changes, modifications or interpretations to the guidance which may impact the current conclusions. The Company expects to adopt the new standard for the fiscal year beginning January 1, 2018 and has not yet determined whether the full or modified retrospective application method will be applied.

In July 2015, the FASB issued authoritative guidance requiring entities that do not measure inventory using the retail inventory method or on a last-in, first-out basis to record inventory at the lower of cost and net realizable value. Net realizable value is the

estimated selling prices in the ordinary course of business, less reasonably predictabl e costs of completion, disposal, and transportation. This guidance is effective on a prospective basis for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted. The Company adopted this guidance for the reporting period beginning January 1, 2017. The adoption of this guidance did not have a material impact on the Company's financial statements or disclosures.

In January 2016, the FASB issued authoritative guidance requiring, among other things, that certain equity investments be measured at fair value with changes in fair value recognized in net income, that financial assets and financial liabilities be presented separately by measurement category and form of financial asset on the balance sheet or the accompanying notes to the financial statements, that the prior requirement to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet be eliminated, and that a reporting organization is to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the organization has elected to measure the liability at fair value in accordance with the fair value option for financial instruments. This guidance is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption of the instrument-specific credit risk amendment is permitted. The Company expects to adopt this guidance for the fiscal year beginning on January 1, 2018, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company does not currently have any equity method investments.

In February 2016, the FASB issued authoritative guidance requiring, among other things, that entities recognize the assets and liabilities arising from leases on the balance sheet under revised criteria, while the classification criteria for distinguishing between finance leases and operating leases are substantially similar to the classification criteria in the previous leases guidance. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. This guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The Company anticipates that the adoption of this guidance will materially affect its statement of financial position and will require changes to its processes. The Company has not yet made any decision on the timing of adopting this guidance or the method of adoption with respect to the optional practical expedients, but expects to during 2018.

In March 2016, the FASB issued authoritative guidance clarifying that a change in the counterparty to a derivative instrument that has been designated as the hedging instrument does not necessarily require de-designation of that hedging relationship, provided that all other applicable hedge accounting criteria continue to be met. This guidance is effective on either a prospective basis or modified retrospective basis for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted. The Company adopted this guidance for the reporting period beginning January 1, 2017. The adoption of this guidance did not have a material impact on the Company's financial statements or disclosures.

In March 2016, the FASB issued authoritative guidance requiring entities to assess whether contingent call (put) options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts, and clarifies what steps are required when assessing whether the economic characteristics and risks of call (put) options are clearly and closely related to the economic characteristics and risks of their debt hosts. This guidance is effective on a modified retrospective basis for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted. The Company adopted this guidance for the reporting period beginning January 1, 2017. The adoption of this guidance did not have a material impact on the Company's financial statements or disclosures.

In March 2016, the FASB issued authoritative guidance simplifying the accounting for stock compensation. This guidance, among other things, amends existing accounting and classification requirements primarily around income taxes, forfeitures, and cash payments associated with share-based payment awards to employees. This guidance is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted. The Company adopted this guidance for the reporting period beginning January 1, 2017. The adoption of this guidance did not have a material impact on the Company's financial statements or disclosures.

In August 2016, the FASB issued authoritative guidance clarifying the classification of certain cash receipts and cash payments in the statement of cash flows. This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years, on a retrospective transition method to each period presented. Early adoption is permitted. The Company currently intends to adopt this guidance for the fiscal year beginning on January 1, 2018, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company has not historically engaged in the transactions encompassed by the proposed guidance.

In January 2017, the FASB issued authoritative guidance clarifying the definition of a business when evaluating transactions involving acquisitions or disposals of assets or businesses. This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Certain applications of this guidance are permitted for early adoption. The Company currently intends to adopt this guidance for the fiscal year beginning on January 1, 2018, and does not anticipate that the

adoption of this guidance will have a material impact on its financial statements or disclosures because the Company has not histor ically acquired or disposed of material assets or businesses.

In January 2017, the FASB issued authoritative guidance eliminating the "Step 2" requirement for an entity to determine the fair value of its assets and liabilities for goodwill impairment testing in the same manner that would be required for those assumed in a business combination. Instead, the amended guidance allows an entity to perform goodwill impairment testing by comparing the fair value of a reporting unit with its carrying amount. This guidance is effective for any goodwill impairment tests in fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. The Company currently intends to adopt this guidance for the fiscal year beginning January 1, 2020, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company does not currently have any recorded goodwill.

In February 2017, the FASB issued authoritative guidance clarifying the definition of the term "in substance nonfinancial asset" when accounting for transfers of financial and nonfinancial assets, and other matters concerning the transfer, sale and partial sale of nonfinancial assets to both consolidated entities and non-consolidated counterparties. This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted. The Company currently intends to adopt this guidance for the fiscal year beginning on January 1, 2018, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company has not historically engaged in transfers, sales or partial sales of nonfinancial assets.

In March 2017, the FASB issued authoritative guidance shortening the amortization period to the earliest call date for certain purchased callable debt securities held at a premium. This guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The Company currently intends to adopt this guidance for the fiscal year beginning on January 1, 2019, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company does not currently hold any callable debt securities.

In May 2017, the FASB issued authoritative guidance clarifying what modifications to a share-based payment award may be considered substantive, and therefore requiring the application of modification accounting. This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted. The Company currently intends to adopt this guidance for the fiscal year beginning on January 1, 2018, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company does not currently expect any significant modifications to outstanding share-based payment awards.

In July 2017, the FASB issued authoritative guidance changing the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features, whereby a down round feature no longer precludes equity classification when assessing whether the instrument is indexed to an entity's own stock, and also clarifying existing disclosure requirements for equity-classified instruments. This guidance is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company currently intends to adopt this guidance for the fiscal year beginning on January 1, 2020, and does not anticipate that the adoption of this guidance will have a material impact on its financial statements or disclosures because the Company does not currently hold any significant financial instruments with down round features.

2. Liquidity and Going Concern Uncertainty

As of June 30, 2017, cash totaled $10.0 million and the Company had an accumulated deficit of $183.8 million. For the year and six-month periods ended December 31, 2016 and June 30, 2017, the Company incurred net losses of $18.4 million and $10.1 million, respectively. At June 30, 2017, the Company had aggregate net interest-bearing indebtedness of $3.8 million, of which $2.6 million was due within one year in the absence of subjective acceleration of amounts due under a credit facility entered into in April 2014 with Oxford Finance LLC, or the April 2014 Credit Facility, in addition to $3.2 million of other non-interest bearing current liabilities. Additionally, in February 2016, the Company signed a firm, non-cancelable, and unconditional commitment in an aggregate amount of $1,062,500 with a vendor to purchase certain inventory items, payable in minimum quarterly installments of $62,500 through May 2020, under which $628,760 remained outstanding at June 30, 2017 (see Note 11). These factors raise substantial doubt about the Company's ability to continue as a going concern for the one-year period following the date that these unaudited condensed financial statements were issued. The accompanying unaudited condensed financial statements have been prepared assuming that the Company will continue as a going concern. The unaudited condensed financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the possible inability of the Company to continue as a going concern.

While the Company is currently in the commercialization stage of operations, the Company has not yet achieved profitability and anticipates that it will continue to incur net losses for the foreseeable future. Historically, the Company's principal sources of cash have included proceeds from the issuance of common and preferred stock, proceeds from the exercise of warrants to purchase common stock, proceeds from the issuance of debt, and revenues from laboratory services. The Company's principal uses of cash have

included cash used in operations, payments relating to purchases of property and equipment and repayments of borrowings. The Company expects that the principal uses of cash in the future will be for continuing operations, hiring of sales and marketing personnel and increased sales and marketing activities, funding of research and development, capital expenditures, and general working capital requirements. The Company expects that, as revenues grow, sales and marketing and research and development expenses will continue to gro w, albeit at a slower rate and, as a result, the Company will need to generate significant growth in net revenues to achieve and sustain income from operations.

In May 2015, the SEC declared effective a shelf registration statement filed by the Company. The shelf registration statement allows the Company to issue any combination of its common stock, preferred stock, debt securities and warrants from time to time for an aggregate initial offering price of up to $50 million, subject to certain limitations for so long as the Company's public float is less than $75 million. A public offering of the Company's common stock and warrants to purchase its common stock closed on May 4, 2016, pursuant to which the Company received net cash proceeds of approximately $4.3 million (see Note 3). Subsequent to the closing of this offering on May 4, 2016, no warrants sold in this offering have been exercised, with approximately $4.5 million in gross warrant proceeds remaining outstanding and available to be exercised at $3.90 per share until their expiration in May 2021. A second offering of the Company's common stock was effected under this shelf registration statement on March 28, 2017, the closing of which occurred on March 31, 2017, pursuant to which the Company received net cash proceeds of approximately $8.6 million (see Note 3). In a concurrent private placement, the Company sold unregistered warrants to purchase up to 2,160,000 shares of the Company's common stock that closed concurrently with the March 31, 2017 offering of common stock sold pursuant to this shelf registration statement. Subsequent to the closing of the sales of these unregistered warrants, no warrants sold have been exercised, with $5.4 million in gross warrant proceeds remaining outstanding and available to be exercised at $2.50 per share commencing on the six month anniversary of the closing of the offering, or September 30, 2017, until their expiration in March 2022. The specific terms of additional future offerings, if any, under this shelf registration statement would be established at the time of such offerings. A public offering of the Company's common stock and warrants to purchase its common stock was effected under an underwriting agreement dated October 14, 2016 between the Company, Roth Capital Partners, LLC and Feltl and Company, Inc., as underwriters named therein, the closing of which occurred on October 19, 2016, pursuant to which the Company received net cash proceeds of approximately $9.0 million (see Note 3). Subsequent to the closing of this offering, cash proceeds of approximately $7.5 million have been received from the exercise of warrants sold in this offering, while approximately $3.2 million in gross warrant proceeds remain outstanding and available to be exercised at $1.10 per share until their expiration in October 2021. Pursuant to a common stock and warrant purchase agreement dated August 9, 2017 between the Company and Ally Bridge, the Company received net cash proceeds of approximately $2.0 million as a result of the sale of its common stock and warrants. Subsequent to August 9, 2017, no additional cash proceeds had been received from the exercise of warrants sold in this offering, with approximately $2.2 million in gross warrant proceeds remaining outstanding and available to be exercised at $1.50 per share until their expiration in August 2022.

Management's Plan to Continue as a Going Concern

In order to continue as a going concern, the Company will need, among other things, additional capital resources. Until the Company can generate significant cash from operations, including assay revenues, management's plans to obtain such resources for the Company include proceeds from offerings of the Company's equity securities or debt, or transactions involving product development, technology licensing or collaboration. Management can provide no assurances that any sources of a sufficient amount of financing will be available to the Company on favorable terms, if at all.

3. Sales of Equity Securities

On December 21, 2015, the Company entered into a common stock purchase agreement with Aspire Capital Fund, LLC, or Aspire Capital, which committed to purchase up to an aggregate of $15.0 million of shares of the Company's common stock over the 30-month term of the common stock purchase agreement. On November 4, 2016, the Company voluntarily terminated this common stock purchase agreement. Upon execution of the common stock purchase agreement, the Company sold to Aspire Capital 208,334 shares of common stock at $4.80 per share for proceeds of $1,000,000, and concurrently also entered into a registration rights agreement with Aspire Capital, pursuant to which the Company filed a registration statement registering the sale of the shares of the Company's common stock that were issued to Aspire Capital under the common stock purchase agreement. In consideration for entering into, and concurrently with the execution of, the common stock purchase agreement, the Company issued to Aspire Capital 55,000 shares of its common stock. The proceeds received by the Company under the common stock purchase agreement were used for working capital and general corporate purposes. During the year ended December 31, 2016, the Company submitted purchase notices to Aspire Capital for an aggregate of 173,145 shares of common stock for gross proceeds of $544,051. Costs associated with this offering of approximately $42,000 and $79,000 during the years ended December 31, 2015 and 2016, respectively, were also recorded to common stock issuance costs under applicable accounting guidance, and as such, the total net increase in capital related to these transactions was approximately $1.4 million.

In May 2015, the SEC declared effective a shelf registration statement filed by the Company. The shelf registration statement allows the Company to issue any combination of its common stock, preferred stock, debt securities and warrants from time to time for an aggregate initial offering price of up to $50 million, subject to certain limitations for so long as the Company's public float is less than

$75 million. Pursuant to an exclusive placement agent agreement dated April 25, 2016 between the Company and H.C. Wainwright & Co., LLC, and a securities purchase agreement dated April 29, 2016 between the Company and the purchasers signatory thereto, a public offering of 1,662,191 shares of the Company's common stock and warrants to purchase up to an aggreg ate of 1,163,526 shares of common stock was effected under this registration statement at a combined offering price of $3.00. All warrants sold in this offering have a per share exercise price of $3.90, are exercisable immediately and expire five years fro m the date of issuance. The estimated grant date fair value of these warrants of approximately $2.0 million was recorded as an offset to additional paid-in capital upon the closing of this offering. The closing of the sale of these securities to the purcha sers occurred on May 4, 2016, pursuant to which the Company received, after deducting $0.7 million of costs directly associated with the offering that were recorded as an offset to additional paid-in capital under applicable accounting guidance, approximat ely $4.3 million of net cash proceeds. Subsequent to the closing of this offering on May 4, 2016, no warrants sold in this offering have been exercised, with approximately $4.5 million in gross warrant proceeds remaining outstanding and available to be exe rcised at $3.90 per share until their expiration in May 2021. Pursuant to an exclusive placement agent agreement dated March 28, 2017 between the Company and Roth Capital Partners, LLC as lead placement agent, and WestPark Capital and Chardan Capital as co -placement agents, a securities purchase agreement for a second offering of 4,320,000 shares of the Company's common stock was effected under this registration statement at per share price of $2.15, which closed on March 31, 2017. In a concurrent private p lacement, the Company sold unregistered warrants to purchase up to an aggregate of 2,160,000 shares of the Company's common stock that closed concurrently with the March 2017 offering of common stock sold pursuant the shelf registration statement. All warr ants sold in this offering have a per share exercise price of $2.50, are exercisable beginning on the six-month anniversary of the date of issuance, and expire five years from the date first exercisable. The estimated grant date fair value of these warrant s of approximately $2.8 million was recorded as an offset to additional paid-in capital upon the closing of this offering (see Note 4). At the closing of these sales on March 31, 2017, the Company received, after deducting $0.7 million of costs directly as sociated with the offering that were recorded as an offset to additional paid-in capital under applicable accounting guidance, approximately $8.6 million of net cash proceeds. In connection with the closing of the offering, the Company has agreed to certai n contractual terms that limit its ability to issue variable rate securities for a period of one year following the closing of the offering, with certain exceptions. The specific terms of additional future offerings, if any, under this shelf registration s tatement would be established at the time of such offerings.

Pursuant to an underwriting agreement dated October 14, 2016 between the Company, Roth Capital Partners, LLC and Feltl and Company, Inc., as underwriters named therein, a public offering of 9,100,000 shares of the Company's common stock and warrants to purchase up to an aggregate of 9,100,000 shares of common stock was effected at a combined offering price of $1.10. The estimated grant date fair value of these warrants of approximately $5.2 million was recorded as an offset to additional paid-in capital upon the closing of this offering. Additionally, the underwriters were granted a 30-day option to purchase up to 1,365,000 additional shares of common stock at a price of $1.0331 per share, net of the underwriting discount, and/or additional warrants to purchase up to 1,365,000 shares of common stock at a price of $0.0009 per warrant to cover overallotments, if any, of which the underwriters exercised their overallotment option to purchase 627,131 option warrants for total proceeds to the Company of $564. The estimated aggregate grant date fair value of the overallotment options and warrants of approximately $0.8 million was recorded as an offset to additional paid-in capital upon the closing of this offering. All warrants sold in this offering have a per share exercise price of $1.10, are exercisable immediately and expire five years from the date of issuance. The closing of the sale of these securities to the underwriters occurred on October 19, 2016, when the Company received, after deducting $1.0 million of costs directly associated with the offering that were recorded as an offset to additional paid-in capital under applicable accounting guidance, $9.0 million of net cash proceeds. Subsequent to the closing of this offering, approximately $7.5 million of additional cash proceeds had been received from the exercise of warrants sold in this offering. As such, the total net increase in capital as a result of the sale of these shares and warrants has been $16.5 million.

Pursuant to a common stock and warrant purchase agreement dated August 9, 2017 between the Company and Ally Bridge, an offering of 1,466,667 shares of the Company's common stock and warrants to purchase up to an aggregate of 1,434,639 shares of common stock was effected at a combined offering price of $1.50 per unit for total gross proceeds to the Company of $2.2 million (see Note 13).

4. Fair Value Measurement

The estimated fair value of the April 2014 Credit Facility at June 30, 2017 approximated carrying value, which was determined using a discounted cash flow analysis. The analysis considered interest rates of instruments with similar maturity dates, which involved the use of significant unobservable Level 3 inputs.

Other Fair Value Measurements

As of the closing of the Company's March 31, 2017 offering, the estimated grant date fair value of $1.31 per share associated with the warrants to purchase 2,160,000 shares of common stock issued in this offering, or a total of approximately $2.8 million, was recorded as an offset to additional paid-in capital, and was estimated using a Black-Scholes valuation model with the following assumptions:

Stock price	$	2.13
Exercise price	$	2.50
Expected dividend yield		0.00%
Discount rate-bond equivalent yield		1.93%
Expected life (in years)		5.00
Expected volatility		80.0%

Pursuant to a common stock and warrant purchase agreement dated August 9, 2017 between the Company and Ally Bridge, an offering of 1,466,667 shares of the Company's common stock and warrants to purchase up to an aggregate of 1,434,639 shares of common stock was effected at a combined offering price of $1.50 per unit for total gross proceeds to the Company of $2.2 million. The estimated grant date fair value of these warrants of approximately $1.03 per share, or a total of approximately $1.5 million, was recorded as an offset to additional paid-in capital (see Note 13).

5. Balance Sheet Details

The following provides certain balance sheet details:

	December 31, 2016	June 30, 2017
Fixed Assets		
Machinery and equipment	$ 2,728,468	$ 3,012,178
Furniture and office equipment	143,726	147,976
Computer equipment and software	620,582	925,206
Leasehold improvements	517,968	523,665
Financed equipment	1,559,690	1,725,205
Construction in process	169,896	236,474
Total fixed assets, gross	5,740,330	6,570,704
Less accumulated depreciation and amortization	(3,933,999)	(4,168,449)
Total fixed assets, net	$ 1,806,331	$ 2,402,255
Accrued Liabilities		
Accrued interest	$ 20,776	$ 14,495
Accrued payroll	168,727	199,024
Accrued vacation	364,953	498,676
Accrued bonuses	422,868	448,380
Accrued sales commissions	77,844	67,354
Current portion of deferred rent	67,085	96,356
Accrued other	37,783	63,482
Total accrued liabilities	$ 1,160,036	$ 1,387,767

6. April 2014 Credit Facility

On April 30, 2014, the Company received net cash proceeds of approximately $4,898,000 pursuant to the execution of the April 2014 Credit Facility with Oxford Finance LLC. Upon the entry into the April 2014 Credit Facility, the Company was required to pay the lender a facility fee of $50,000 in conjunction with the funding of the term loan. The April 2014 Credit Facility is secured by substantially all of the Company's personal property other than its intellectual property. Amounts due to Oxford Finance LLC under the April 2014 Credit Facility are callable before maturity by the lender under certain subjective acceleration clauses of the underlying agreement, including changes deemed to be materially adverse by the lender. The term loan under the April 2014 Credit Facility bears interest at an annual rate equal to the greater of (i) 7.95% or (ii) the sum of (a) the three-month U.S. LIBOR rate reported in the Wall Street Journal three business days prior to the funding date of the term loan, plus (b) 7.71%. The term loan bears interest at an annual rate of 7.95%. The Company was required to make interest-only payments on the term loan through August 1, 2015. The outstanding term loan under the April 2014 Credit Facility began amortizing at the end of the applicable interest-only period, with monthly payments of principal and interest being made by the Company to the lender in consecutive monthly installments following such interest-only period. The term loan under the April 2014 Credit Facility matures on July 1, 2018. Under the original terms of the underlying agreement, the Company is also required to make a final payment to the lender equal to 5.5% of the original principal amount of the term loan funded. At its option, the Company may prepay the outstanding principal balance of the term loan in whole but not in part, subject to a prepayment fee of 1% of any amount prepaid.

On June 30, 2016, the Company entered into an amendment of the April 2014 Credit Facility. This amendment required the Company to make interest-only payments on the term loan from July 1, 2016 through September 30, 2016, and also requires an additional final

payment of $50,000 to the lender. The terms of the amendment require the amortization of the outstanding amount due under the term loan to commence at the end of the applicable interest-only period, with monthly payments of principal and interest, in arrears, being made by the Company to the lender in consecutive monthly installments following such interest-only period. Additionally, pursuant to the amendment the aggregate outstanding principal amount of the Company's perm itted indebtedness, consisting of capitalized lease obligations and purchase money indebtedness outstanding at any time, was increased to $1.2 million. The June 30, 2016 amendment of the April 2014 Credit Facility was accounted for as a modification of deb t under applicable accounting guidance. On June 28, 2017, the Company entered into an amendment of the April 2014 Credit Facility whereby the aggregate outstanding principal amount of the Company's permitted indebtedness was increased to $3.0 million.

The April 2014 Credit Facility includes affirmative and negative covenants applicable to the Company and any subsidiaries created in the future. The affirmative covenants include, among others, covenants requiring the Company to maintain its legal existence and governmental approvals, deliver certain financial reports and maintain insurance coverage. The negative covenants include, among others, restrictions on transferring collateral, incurring additional indebtedness, engaging in mergers or acquisitions, paying dividends or making other distributions, making investments, creating liens, selling assets, and suffering a change in control, in each case subject to certain exceptions. The April 2014 Credit Facility also includes events of default, the occurrence and continuation of which provide Oxford Finance LLC, as collateral agent, with the right to exercise remedies against the Company and the collateral securing the term loan under the April 2014 Credit Facility, including foreclosure against the Company's properties securing the April 2014 Credit Facility, including its cash. These events of default include, among other things, the Company's failure to pay any amounts due under the April 2014 Credit Facility, a breach of covenants under the April 2014 Credit Facility, insolvency, a material adverse change, the occurrence of any default under certain other indebtedness in an amount greater than $250,000, and a final judgment against the Company in an amount greater than $250,000.

A warrant to purchase up to 17,655 shares of the Company's common stock at an exercise price of $14.16 per share with a term of 10 years was issued to Oxford Finance LLC on April 30, 2014. Issuance costs of $102,498 associated with the term loan under the April 2014 Credit Facility were recorded as a discount to outstanding debt as of the closing date, resulting in net proceeds of $4,897,502. The estimated fair value of the warrant issued of $233,107 was also recorded as a discount to outstanding debt as of the closing date. The discounts and other issuance costs are amortized to interest expense utilizing the effective interest method over the underlying term of the loan, with total unamortized discounts of $78,408 and $71,503 remaining at December 31, 2016 and June 30, 2017, respectively. The effective annual interest rate associated with the April 2014 Credit Facility was 13.87% at both December 31, 2016 and June 30, 2017. As of June 30, 2017, total remaining principal payments of $986,492 and $1,201,409 were due under the April 2014 Credit Facility during the fiscal years ending December 31, 2017 and 2018, respectively.

7. Equipment Financings

The Company leases certain laboratory equipment under arrangements accounted for as capital leases and classified as equipment financings. The financed equipment is depreciated on a straight-line basis over periods ranging from 5 to 7 years. The total gross value of fixed assets capitalized under such financing arrangements was $1,559,690 and $1,725,205 at December 31, 2016 and June 30, 2017, respectively. Total accumulated depreciation related to financed equipment was approximately $525,000 and $629,000 at December 31, 2016 and June 30, 2017, respectively. Total depreciation expense related to financed equipment was approximately $27,000 and $52,000 for the three months ended June 30, 2016 and 2017, respectively. Total depreciation expense related to financed equipment was approximately $53,000 and $108,000 for the six months ended June 30, 2016 and 2017, respectively. Fixed assets purchased totaling $165,516 during the six months ended June 30, 2017 were recorded as equipment financings. The aggregate weighted average effective annual interest rate related to the equipment financings was 13.18% and 13.78% at December 31, 2016 and June 30, 2017, respectively, and the maturity dates on such outstanding arrangements range from July 2017 to May 2023.

The following schedule sets forth the remaining future minimum lease payments outstanding under financed equipment arrangements, as well as corresponding remaining sales tax and maintenance obligation payments that are expensed as incurred, due within each respective fiscal year ending December 31, as well as the present value of the total amount of remaining minimum lease payments, as of June 30, 2017:

	Minimum Lease Payments	Maintenance and Sales Tax Obligation Payments
2017	$ 236,430	$ 15,957
2018	301,490	57,294
2019	261,284	64,994
2020	223,105	47,664
2021	217,319	43,055
Thereafter	367,769	66,987
Total payments	1,607,397	295,951
Less amount representing interest	(450,300)	—
Present value of payments	$ 1,157,097	$ 295,951

At June 30, 2017, the present value of minimum lease payments due within one year was $362,777.

8. Stock-Based Compensation

Equity Incentive Plans

The Company maintains two equity incentive plans: the Amended and Restated 2013 Equity Incentive Plan, or the 2013 Plan, and the 2007 Equity Incentive Plan, or the 2007 Plan. The 2013 Plan includes a provision that shares available for grant under the Company's 2007 Plan become available for issuance under the 2013 Plan and are no longer available for issuance under the 2007 Plan. On July 25, 2016, the Company's Board of Directors approved an amendment to the 2013 Plan to reserve 333,333 shares of the Company's common stock exclusively for the grant of stock awards to employees who have not previously been an employee or director of the Company, except following a bona fide period of non-employment, as an inducement material to the individual's entering into employment with the Company, as defined under applicable Nasdaq Listing Rules. At the Company's annual meeting of stockholders held on May 2, 2017, the Company's stockholders approved amendments to the 2013 Plan, which included an increase in the number of non-inducement shares of common stock authorized for issuance under the 2013 Plan by 2,500,000. As of June 30, 2017, under all plans, a total of 3,522,955 non-inducement shares were authorized for issuance, 2,674,028 non-inducement stock options and restricted stock units, or RSUs, had been issued and were outstanding, and 741,614 non-inducement shares were available for grant. As of June 30, 2017, a total of 333,333 inducement shares were authorized for issuance, 158,049 inducement stock options and RSUs had been issued and were outstanding, and 175,284 inducement shares were available for grant under the 2013 Plan.

Stock Options

A summary of stock option activity for the six months ended June 30, 2017 is as follows:

	Number of Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term in Years
Outstanding at December 31, 2016	896,662	$ 8.80	8.5
Granted	1,579,399	$ 1.52	
Exercised	—	—	
Cancelled/forfeited/expired	(94,902)	$ 5.75	
Outstanding at June 30, 2017	2,381,159	$ 4.06	9.1
Vested and unvested expected to vest, June 30, 2017	2,187,470	$ 4.28	9.1

The intrinsic values of options outstanding at December 31, 2016 and June 30, 2017 were zero and $7,623, respectively, and the intrinsic value of options vested and unvested expected to vest at June 30, 2017 was $6,721. The total weighted-average grant date fair value of the 173,157 stock options that vested during the six months ended June 30, 2017 was $6.09.

The assumptions used in the Black-Scholes pricing model for stock options granted during the six months ended June 30, 2017 were as follows:

Stock and exercise prices	$1.37 – $2.13
Expected dividend yield	0.00%
Discount rate-bond equivalent yield	1.79% – 2.08%
Expected life (in years)	5.12 – 6.09
Expected volatility	80.0% - 90.0%

Using the assumptions described above, with stock and exercise prices being equal on date of grant, the weighted-average estimated fair value of options granted in the six months ended June 30, 2017 was $1.04 per share.

On August 31, 2015, the Company's Board of Directors approved the issuance of 33,333 performance stock options with an estimated grant date fair value of $4.40 per share and an exercise price of $6.03 per share to its Chief Executive Officer, or CEO, pursuant to the 2013 Plan. On February 29, 2016, the Company's Board of Directors approved the issuance of 33,333 performance stock options with an estimated grant date fair value of $2.87 per share and an exercise price of $4.02 per share to its CEO pursuant to the 2013 Plan. Vesting of these stock options was based on the Company's achievement of specified objectives by December 31, 2016 as determined by the Company's Board of Directors or the Compensation Committee of the Board of Directors. During the six months ended June 30, 2017, 6,333 of the performance stock options granted on August 31, 2015 and 10,000 of the performance stock options granted on February 29, 2016 were declared vested by the Company's Board of Directors, and the remaining 50,333 shares underlying these awards were forfeited.

On July 25, 2016, the Company entered into an employment agreement with its new Chief Financial Officer, Senior Vice President of Operations and Secretary, or CFO. Pursuant to the terms of this employment agreement, on July 29, 2016 the CFO was granted inducement stock option awards with an exercise price of $1.95 per share to purchase up to (i) 66,666 shares of the Company's common stock with an estimated grant date fair value of $1.45 per share, 25% of which vested on the one-year anniversary of the commencement of the CFO's employment with the Company, and remainder of which vest in equal monthly installments over the following three years, and (ii) 33,333 shares of the Company's common stock with an estimated grant date fair value of $1.26 per share, which vested upon the Company's achievement of specified corporate goals for 2016 and the consummation of a specified financing transaction. During the six months ended June 30, 2017, 16,383 shares of the performance option award granted on July 29, 2016 were declared vested by the Company's Board of Directors, and the remaining 16,950 shares underlying this award were forfeited.

On May 2, 2017, the Company's Board of Directors approved the issuance of an aggregate of 550,000 performance stock options to be granted on May 31, 2017 to certain of the Company's employees and all of its executive officers pursuant to the 2013 Plan, of which 200,000 performance stock options were granted to the Company's CEO, 100,000 performance stock options were granted to its CFO, and 75,000 performance stock options were granted to each of its Chief Scientific Officer, Senior Vice President and Senior Medical Director, Senior Vice President. Each performance stock option granted on May 31, 2017 has an exercise price of $1.50 per share, an estimated grant date fair value of $0.99 per share, and is subject to vesting as determined by the Company's Board of Directors based on the achievement of specified corporate goals for 2017, provided that none shall vest unless a minimum level of 70% of the Company's corporate goals for 2017 are achieved, as follows:

	Percentage of Overall Performance Stock Option Grant Subject to Vesting
Target	
Minimum revenue	20%
Cost of revenue reductions and improvements	15%
Increase cash generated from operations	15%
Minimum cash on-hand at December 31, 2017	15%
Minimum customer agreements, product licensing and product launch	20%
Implementation of new products and utility trials	15%
Total	100%

Restricted Stock

A summary of RSU activity for the six months ended June 30, 2017 is as follows:

	Number of Shares		Weighted Average Grant Date Fair Value
Outstanding at December 31, 2016	174,249	$	2.68
Granted	350,000	$	1.50
Vested and issued	(65,831)	$	2.09
Forfeited	(7,500)	$	2.10
Outstanding at June 30, 2017	450,918	$	1.87
Vested and unvested expected to vest, June 30, 2017	408,481	$	1.91

At June 30, 2017, the intrinsic values of RSUs outstanding and RSUs unvested and expected to vest were $617,758 and $559,619, respectively. Of the 450,918 RSUs outstanding at June 30, 2017, 10,920 are fully vested. On July 6, 2016, the Compensation Committee of the Company's Board of Directors approved retention RSUs for an aggregate of 58,332 shares of common stock to three of the Company's executive officers pursuant to the 2013 Plan, including retention RSUs for 25,000 shares of common stock to its CEO. Each of these retention RSUs had a grant date fair value of $1.86 per share for a grant date fair value of $108,498 to all three officers, in aggregate. These retention RSUs vested fully on the one-year anniversary of the date of grant, and were subject to continuing service by the holders of such RSUs. Pursuant to the terms of the Company's employment agreement with its CFO dated July 25, 2016, the CFO was granted an inducement RSU award on July 29, 2016 covering 25,000 shares of the Company's common stock with a grant date fair value of $1.95 per share, 100% of which vested on the one-year anniversary of the commencement of the CFO's employment with the Company.

On May 2, 2017, the Company's Board of Directors approved the issuance of an aggregate of 175,000 time-based RSUs and 175,000 performance RSUs to be granted on May 31, 2017 to certain of the Company's employees and all of its executive officers pursuant to the 2013 Plan, of which 50,000 time-based RSUs and 25,000 performance RSUs were granted to its CEO, and 25,000 time-based RSUs and 25,000 performance RSUs were granted to each other executive officer. Each RSU granted on May 31, 2017 has a grant date fair value of $1.50 per share. Vesting of the time-based RSUs granted on May 31, 2017 is subject to continuing service and occurs on the one year anniversary of the vesting commencement date, or May 2, 2018, while the performance RSUs are subject to continuous service and vesting is as determined by the Company's Board of Directors based on the achievement of specified corporate goals for 2017, provided that none shall vest unless a minimum level of 70% of the Company's corporate goals for 2017 are achieved, as follows:

	Percentage of Overall Performance RSU Grant Subject to Vesting
Target	
Minimum revenue	20%
Cost of revenue reductions and improvements	15%
Increase cash generated from operations	15%
Minimum cash on-hand at December 31, 2017	15%
Minimum customer agreements, product licensing and product launch	20%
Implementation of new products and utility trials	15%
Total	100%

Stock-based Compensation Expense

The following table presents the effects of stock-based compensation related to equity awards to employees and nonemployees on the unaudited condensed statements of operations and comprehensive loss during the periods presented:

	For the three months ended June 30,		For the six months ended June 30,	
	2016	2017	2016	2017
Stock Options				
Cost of revenues	$ 29,412	$ 41,615	$ 55,487	$ 73,385
Research and development expenses	25,961	39,172	58,964	68,428
General and administrative expenses	264,566	157,683	537,135	349,736
Sales and marketing expenses	1,897	19,606	39,240	60,146
Total expenses related to stock options	321,836	258,076	690,826	551,695
RSUs				
Cost of revenues	1,916	23,133	1,916	38,300
Research and development expenses	1,452	22,714	1,452	37,072
General and administrative expenses	1,008	56,473	1,008	86,406
Sales and marketing expenses	4,508	22,843	4,508	42,988
Total stock-based compensation	$ 330,720	$ 383,239	$ 699,710	$ 756,461

Stock-based compensation expense was recorded net of estimated forfeitures of 0% - 8% per annum during the six months ended June 30, 2016 and 2017. As of June 30, 2017, total unrecognized stock-based compensation expense related to unvested stock options and RSUs, adjusted for estimated forfeitures, was approximately $2,694,000 and is expected to be recognized over a weighted-average period of approximately 2.2 years.

9. Common Stock Warrants Outstanding

A summary of equity-classified common stock warrant activity for the six months ended June 30, 2017 is as follows:

	Number of Shares	Weighted Average Exercise Price Per Share	Average Remaining Contractual Term in Years
Outstanding at December 31, 2016	11,623,987	$ 1.93	4.6
Issued	2,160,000	$ 2.50	
Exercised	(6,811,850)	$ 1.10	
Expired	—	—	
Outstanding at June 30, 2017	6,972,137	$ 2.92	4.3

All warrants outstanding at June 30, 2017 are exercisable, except for the 2,160,000 warrants issued on March 31, 2017, which first become exercisable for a five-year period beginning on September 30, 2017, or the six-month anniversary of the closing of the associated offering. The intrinsic value of equity-classified common stock warrants outstanding at June 30, 2017 was $787,126.

Pursuant to a common stock and warrant purchase agreement dated August 9, 2017 between the Company and Ally Bridge, an offering of 1,466,667 shares of the Company's common stock and warrants to purchase up to an aggregate of 1,434,639 shares of common stock was effected. All warrants sold in this offering have a per share exercise price of $1.50, are exercisable immediately and expire five years from the date of issuance (see Note 13).

10. Net Loss per Common Share

Basic and diluted net loss per common share is determined by dividing net loss applicable to common shareholders by the weighted-average common shares outstanding during the period. Because there is a net loss attributable to common shareholders for the three and-six months ended June 30, 2016 and 2017, the outstanding RSUs, warrants, and common stock options have been excluded from the calculation of diluted loss per common share because their effect would be anti-dilutive. Therefore, the weighted-average shares used to calculate both basic and diluted loss per share are the same.

On September 29, 2016, the Company effected a one-for-three reverse stock split of all common shares outstanding. The calculation of weighted-average shares outstanding has been adjusted for this reverse stock split as if it had occurred on December 31, 2015.

The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding for the periods presented, as they would be anti-dilutive:

	For the three and six-months ended June 30,	
	2016	2017
Preferred warrants outstanding (number of common stock equivalents)	529	529
Common warrants outstanding	1,896,856	6,972,137
RSUs outstanding	86,756	450,918
Common options outstanding	731,400	2,381,159
Total anti-dilutive common share equivalents	2,715,541	9,804,743

11. Commitments and Contingencies

In the normal course of business, the Company may be involved in legal proceedings or threatened legal proceedings. The Company is not party to any legal proceedings or aware of any threatened legal proceedings that are expected to have a material adverse effect on its financial condition, results of operations or liquidity.

In February 2016, the Company signed a firm, non-cancelable, and unconditional commitment in an aggregate amount of $1,062,500 with a vendor to purchase certain inventory items, payable in quarterly installments of $62,500 through May 2020. At June 30, 2017, a total of $628,760 remained outstanding under this purchase commitment.

12. Related Party Transactions

A member of the Company's management is the controlling person of Aegea Biotechnologies, Inc., or Aegea. On September 2, 2012, the Company entered into an Assignment and Exclusive Cross-License Agreement, or the Cross-License Agreement, with Aegea. The Company received payments totaling $19,047 and $15,325 during the year ended December 31, 2016 and the six months ended June 30, 2017, respectively, from Aegea as reimbursements for shared patent costs under the Cross-License Agreement.

Pursuant to a sublease agreement dated March 30, 2015, the Company subleased 9,849 square feet, plus free use of an additional area, of its San Diego facility to an entity affiliated with the Company's non-executive Chairman for $12,804 per month, with a refundable security deposit of $12,804 due from the subtenant. The initial term of the sublease expired on July 31, 2015, and was subject to renewal on a month-to-month basis thereafter. On February 1, 2017, the Company received notice from the subtenant terminating the sublease effective March 31, 2017. A total of $76,824 and $38,412 in rental income was recorded to other income/(expense) in the Company's unaudited condensed statements of operations and comprehensive loss during the six months ended June 30, 2016 and 2017, respectively.

Three members of the Company's Board of Directors participated in its public offering in May 2016, purchasing an aggregate of 58,335 shares of the Company's common stock and warrants to purchase up to an aggregate of 40,832 shares of its common stock for total gross proceeds to the Company of $175,000. Additionally, a trust affiliated with Claire K.T. Reiss, who at the time was the beneficial owner of more than 10% of the Company's outstanding common stock, participated in the Company's public offering in May 2016, purchasing 204,758 shares of its common stock and warrants to purchase up to 143,330 shares of its common stock for total gross proceeds to the Company of $614,273.

Seven members of the Company's Board of Directors, including its CEO, and all three of the Company's other executive officers participated in the Company's public offering in October 2016, purchasing an aggregate of 534,088 shares of common stock and warrants to purchase up to an aggregate of 534,088 shares of common stock for total gross proceeds to the Company of $587,497. Additionally, a trust affiliated with Claire K.T. Reiss, who at the time was the beneficial owner of more than 10% of the Company's outstanding common stock, participated in the Company's public offering in October 2016, purchasing 227,272 shares of its common stock and warrants to purchase up 227,272 shares of its common stock for total gross proceeds to the Company of $249,999. Further, several of the Company's employees and one of its consultants participated in the Company's public offering in October 2016, purchasing an aggregate of 79,090 shares of its common stock and warrants to purchase up to an aggregate of 79,090 shares of its common stock for total aggregate gross proceeds to the Company of $86,999.

13. Subsequent Events

Pursuant to a common stock and warrant purchase agreement dated August 9, 2017 between the Company and Ally Bridge, an offering of 1,466,667 shares of the Company's common stock and warrants to purchase up to an aggregate of 1,434,639 shares of

common stock was effected at a combined offering price of $1.50 per unit for total gross proceeds to the Co mpany of $2.2 million. All warrants sold in this offering have a per share exercise price of $1.50, are exercisable immediately and expire five years from the date of issuance. The estimated grant date fair value of these warrants of approximately $1.03 pe r share, or a total of approximately $1.5 million, was recorded as an offset to additional paid-in capital upon the closing of this offering , and was estimated using Black-Scholes valuation models with the following assumptions:

Stock price	$	1.39
Exercise price	$	1.50
Expected dividend yield		0.00%
Discount rate-bond equivalent yield		1.81%
Expected life (in years)		5.00
Expected volatility		100.0%

Subsequent to August 9, 2017 and through the date that these unaudited condensed financial statements were available to be issued, no additional cash proceeds had been received from the exercise of warrants sold in this offering. As such, the total increase in capital as a result of the sale of these shares and warrants has been approximately $2.0 million after deducting an estimated $0.2 million of associated costs incurred, which were offset against these proceeds under applicable accounting guidance.

I tem 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed financial statements and related notes included in this Quarterly Report on Form 10-Q and the audited financial statements and notes thereto as of and for the year ended December 31, 2016 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on March 28, 2017. Past operating results are not necessarily indicative of results that may occur in future periods.

Company Overview

We are an early stage molecular oncology diagnostics company that develops and commercializes proprietary circulating tumor cell, or CTC, and circulating tumor DNA, or ctDNA, assays utilizing a standard blood sample, or "liquid biopsy." Our current and planned assays are intended to provide information to aid healthcare providers to identify specific oncogenic alterations that may qualify a subset of cancer patients for targeted therapy at diagnosis, progression or for monitoring in order to identify specific resistance mechanisms. Often, traditional methodologies such as tissue biopsies are insufficient or unavailable to provide the molecular subtype information necessary for clinical decisions. Our assays have the potential to provide more contemporaneous information on the characteristics of a patient's disease compared with traditional methodologies such as tissue biopsy and radiographic imaging. Additionally, our proprietary blood collection tubes, which allow for the intact transport of liquid biopsy samples for research use only from regions around the world, are anticipated to be sold to laboratory supply distributor(s) commencing in the six months ended December 31, 2017.

Our current assays and our planned future assays focus on key solid tumor indications utilizing our Target-Selector s liquid biopsy technology platform for the biomarker analysis of CTCs and ctDNA from a standard blood sample. Our patented Target-Selector CTC offering is based on an internally developed microfluidics-based cell capture and analysis platform, with enabling features that change how CTC testing is used by clinicians. Our patent pending Target-Selector ctDNA technology enables mutation detection with enhanced sensitivity and specificity, and is applicable to nucleic acid from ctDNA or other sample types, such as CTCs, bone marrow, or cerebrospinal fluid. Our Target-Selector CTC and ctDNA platforms provide both biomarker detection as well as monitoring capabilities, and require only a patient blood sample. We believe that our Target-Selector platform technology has the potential to be developed and commercialized as in vitro diagnostic (IVD) test kits, and we are currently pursuing this option.

At our corporate headquarters facility located in San Diego, California, we operate a clinical laboratory that is certified under the Clinical Laboratory Improvement Amendments of 1988, or CLIA, and accredited by the College of American Pathologists, or CAP. We also performed research and development that led to our current assays, and we also intend to perform research and development for planned assays, at this facility. In addition, we manufacture our microfluidic channels, related equipment and certain reagents. The assays we offer and intend to offer are classified as laboratory developed tests, or LDTs, under CLIA regulations. CLIA certification is required before any clinical laboratory, including ours, may perform testing on human specimens for the purpose of obtaining information for the diagnosis, prevention, or treatment of disease or the assessment of health. In addition, we participate in and have received CAP accreditation, which includes rigorous bi-annual laboratory inspections and adherence to specific quality standards.

Our revenue generating efforts are focused in three areas:

- providing clinical testing that oncologists use in order to determine the best treatment plan for their patients;
- providing clinical trial, research and development services to biopharmaceutical companies developing drug candidates to treat cancer; and
- licensing our proprietary testing and/or technologies to partners in the United States and abroad.

Assays, Products and Services

We have commercialized our Target-Selector assays for a number of solid tumor indications such as: breast cancer, non-small cell lung cancer, or NSCLC, small cell lung cancer, or SCLC, gastric cancer, colorectal cancer, prostate cancer, and melanoma. These assays utilize our dual CTC and ctDNA technology platforms and provide biomarker analysis from a patient's blood sample.

In the case of our breast and gastric cancer offerings, biomarker analysis involves fluorescence in situ hybridization, or FISH, for the detection and quantitation of the human epidermal growth factor receptor 2, or HER2, gene copy number as well as immunocytochemical, or ICC, analysis of estrogen receptor, or ER, protein, progesterone receptor, or PR, protein, and androgen receptor, or AR, protein, which are currently commercially available. A patient's HER2 status provides the physician with information about the appropriateness of therapies such as Herceptin ® or Tykerb ® . ER and PR status provides the physician with information about the appropriateness of endocrine therapies such as tamoxifen and aromatase inhibitors.

Our lung cancer biomarker analysis offering currently includes FISH testing for ALK, ROS1, RET, MET and FGFR1 gene rearrangements, as well as analysis for the T790M, Deletion 19, and L858R mutations of the epidermal growth factor r eceptor, or EGFR gene, as well as BRAF and KRAS. The L858R mutation of the EGFR gene and Exon 19 deletions as activators of EGFR kinase activity are associated with the use of the drugs Tarceva ® , Gilotrif ® and Iressa ® . For lung cancer, we also offer a resi stance profile assay consisting of the biomarkers MET, HER2 (both of which we perform using our technology for CTCs), KRAS, and T790M (both of which are performed using ctDNA in plasma). These assays can be used by physicians to identify the mechanism caus ing disease progression for patients with NSCLC who are being treated with tyrosine kinase inhibitor, or TKI, therapy and therefore may qualify patients for inclusion in a clinical trial. In November 2015, Tagrisso ® was approved by the U.S. Food and Drug A dministration, or FDA, providing another biomarker-based therapy for the treatment of patients with EGFR-related lung cancer. Tagrisso ® is indicated for the treatment of patients with metastatic disease, who have progressed on or after EGFR TKI therapy, an d who have acquired a T790M resistance mutation. Recently, the FDA approved the combination of Novartis' Tafinlar ® (dabrafenib) and Mekinist ® (trametinib) for the treatment of patients with metastatic NSCLC whose tumors express the BRAF V600E mutation, an FDA “breakthrough therapy” designation for patients who have received prior chemotherapy. This combination was approved in Europe for the same indication in March 2017. BRAF mutations, which appear in approximately 1-3% of NSCLC cases globally, are associa ted with Zelboraf ® and Tafinlar ® treatment, as these BRAF inhibitors are both approved for the treatment of patients with melanoma.

Fibroblast growth receptor 1, or FGFR1, amplification is offered using our CTC technology. FGFR1 is present in several tumor types, including both NSCLC and SCLC and has been shown to be a prognostic indicator of progression. FGFR1 is also a key target for several drugs undergoing clinical development.

We analytically validated PD-L1 testing utilizing our CTC technology in 2016. PD-L1 is a biomarker that is informative for immuno-oncology therapies currently marketed for lung cancer and melanoma, as well as therapies in development for multiple tumor types. We collaborated with David Rimm, M.D., Ph.D., a pathologist at Yale Medical School and a scientific advisor to us, on the analytical development of this assay.

We plan to release additional blood-based biomarker assays, such as those that test for ESR1 and NRAS, to our current menu of liquid biopsy assays using blood samples. In addition, we plan to complete the development and offer multiplexed biomarker tests, which will allow the detection and quantitative monitoring of multiple biomarkers in a single assay.

In August 2017, we announced that we had executed a distribution agreement for our proprietary blood collection tubes with VWR International, LLC which can preserve intact cells (such as CTCs) for up to 96 hours and ctDNA for up to 8 days, allowing for the intact transport of research use only liquid biopsy samples from regions around the world.

Pharmaceutical and Research Collaborations

We continue to execute on our strategies intended to expand our business globally, as well as to engage with pharmaceutical companies on clinical trials and assay development. We have distribution agreements in place in Mexico with Quest Diagnostics to support testing for a large pharmaceutical company partner. In addition, we have distribution agreements in place in Turkey, the Czech Republic, the Philippines, Lebanon, Columbia, Israel and Canada.

During 2016, we announced three pharmaceutical collaborations. The first agreement provides testing for a clinical trial that includes patients who have leptomeningeal disease or metastatic lung cancer in the brain. In this exploratory trial, we are testing both cerebral spinal fluid and blood for molecular alterations that could be impacted by treatment. The second agreement is a milestone-based assay development project focused on hepatocellular carcinoma, or liver cancer, whereby we intend to develop assays utilizing both our CTC and ctDNA technologies for clinical trials. The third collaboration involves a study presented at the European Society for Medical Oncology, or ESMO, Annual Congress in October 2016, evaluating the detection of EGFR alterations (del19, L858R and T790M) by our Target-Selector liquid biopsy. Subsequent to this study, we have earned business in both Mexico and Columbia for EGFR testing in blood to qualify patients for the pharmaceutical company’s targeted therapy.

In March 2017, we announced a collaboration with Catalyst Pharmaceuticals for the provision of our Target-Selector platform to screen patients diagnosed with Lambert Eaton Myasthenic Syndrome, or LEMS, for early onset or recurrence of SCLC. Under this agreement, our liquid biopsy tests will be offered by Catalyst Pharmaceuticals at no cost to all patients enrolled in its ongoing Phase III clinical trial designed to demonstrate the safety and efficacy of Firdapse ® (amifampridine phosphate) for the treatment of LEMS. Catalyst Pharmaceuticals will pay us for tests ordered and utilized as part of the agreement. Patients in the Phase III clinical trial will also have access to our liquid biopsy testing in the long-term extension study phase of the trial allowing for testing every six months for up to two years to monitor for early signals of SCLC.

In April 2017, we announced our entry into a preferred provider collaboration and services agreement with Oregon Health & Sciences University on behalf of the OHSU Knight Cancer Institute, or collectively OHSU. The multiphase agreement grants OHSU the rights to commercially offer our Target-Selector liquid biopsy testing services exclusively throughout the state of Oregon. Additionally, we

and OHSU plan to engage in technology transfer, whereby OHSU will have the ability to use Target-Selector assays in-house, and act as a secondary laboratory for our research and testing activities. We and OHSU also plan to co-develop additional liquid biopsy assay technologies and platform cap abilities including highly sensitive, multiplexed assay panels for molecular biomarker detection and assessment. Additional research and development and commercial pilot projects are anticipated under the agreement.

In May 2017, we announced jointly with the Addario Lung Cancer Medical Institute, or ALCMI, entry into a clinical collaboration and initiation of the ALCMI-009 liquid biopsy clinical trial. This large-scale trial was developed, and will be conducted, by ALCMI and its consortium of leading U.S. and international oncology centers. The prospective, multi-center study, which plans to enroll 400 patients, will utilize our Target-Selector testing platform and services to detect and assess cancer biomarkers found in both CTCs and ctDNA from the blood of patients with lung cancer.

Provider Agreements

In January 2017, we a nnounced that we had secured an in-network provider agreement with Blue Cross Blue Shield of Texas, the largest provider of health benefits in Texas. In addition, we entered into a national master business agreement with the Blue Cross Blue Shield Association, a not-for-profit trade association that provides multiple services for its 38-member Blue Cross and Blue Shield health plan companies across the U.S., including forming national strategic vendor partnerships . We were selected by the Blue Cross Blue Shield Association based on a rigorous request-for-proposal progress. This agreement establishes pricing for our Target-Selector liquid biopsy testing service through the Blue Cross Blue Shield Association's group purchasing organization, CareSource Workgroup. The pricing offered by the CareSource Workgroup group purchasing organization is available to those Blue Cross and Blue Shield member health plans that have, or may seek, in-network agreements with us.

In June 2017, we entered into a participating provider agreement with MediNcrease Health Plans, LLC and a preferred provider agreement with Scripps Health Plan Services, Inc., both establishing pricing for our Target-Selector liquid biopsy testing service.

We are currently contracted with nine preferred provider organization networks, two large health plans, and four regional independent physician associations, and expect to continue to gain contracts in order to be considered as an "in-network" provider with additional plans.

Patents and Technology

We have issued patents with broad claims covering our blood collection tube, antibody cocktail approach, microchannel, and CTC detection methodologies. In addition to issuance of patents in the U.S., we have patents for our proprietary microchannel in China, Korea, Europe, Hong Kong, and Japan, and for our antibody cocktail in Australia, Europe, Hong Kong, and Japan. Our patent estate continues to evolve, and in addition to the broad patent estate around our CTC platform, we expect issuances of multiple patents for our novel switch blocker technology in the near future, solidifying our proprietary enrichment methodology for detecting ctDNA with very high sensitivity. Our CTC platform patents were filed from 2005 through 2012, and we expect to have patent protection into the 2030's. Our patents and applications cover not only cancer as a target, but also prenatal and other rare cells of interest. Recently allowed patents in the U.S. cover the capture of "any target of interest" using our antibody capture approach. Patents for our proprietary specimen collection tubes expire in 2031.

As of July 2017, we owned 20 issued patents and 27 patents pending related to our current technologies. Of these, 8 are issued and 5 are pending patents in the U.S., while 12 are issued and 22 are pending patents in non-U.S. territories. Separately, we also own 6 issued patents related to our earlier microarray and cell analysis technology.

Results of Operation s

Three Months Ended June 30, 2016 and 2017

The following table sets forth certain information concerning our results of operations for the periods shown:

	Three months ended June 30,		Change	
	2016	2017	$	%
(dollars in thousands)				
Net revenues	$ 663	$ 1,279	$ 616	93%
Cost of revenues	1,669	2,369	700	42%
Research and development expenses	716	842	126	18%
General and administrative expenses	1,518	1,798	280	18%
Sales and marketing expenses	1,292	1,747	455	35%
Loss from operations	(4,532)	(5,477)	(945)	21%
Interest expense	(99)	(214)	(115)	116%
Other income	38	—	(38)	(100%)
Loss before income taxes	(4,593)	(5,691)	(1,098)	24%
Income tax expense	(1)	(2)	(1)	100%
Net loss	$ (4,594)	$ (5,693)	$ (1,099)	24%

Net Revenues

Net revenues were approximately $1,279,000 for the three months ended June 30, 2017, compared with approximately $663,000 for the same period in 2016, an increase of $616,000, or 93%. Of the $1,279,000 of revenues recognized during the three months ended June 30, 2017, $1,036,000 related to revenues recognized on an accrual basis, while $159,000 related to revenues recognized upon the receipt of cash, as compared to the same period in 2016 when $66,000 of revenues were recognized on an accrual basis and $596,000 of revenues were recognized upon the receipt of cash. During the three months ended March 31, 2017, we converted from cash-based revenue recognition for our commercial revenues, to accrual-based revenue recognition. As a result of the change to accrual-based revenue recognition, we recognized total nonrecurring revenue of $135,000 during the three months ended June 30, 2017 for cases delivered on or prior to December 31, 2016, and the incremental revenue as a result of the change to accrual-based revenue recognition for commercial cases was $191,000.

Total cash collections for commercial cases were $1,004,000 during the three months ended June 30, 2017 as compared to $596,000 during the same period in 2016, an increase of $408,000 owed primarily to improvements in billing and collection timeliness and effectiveness, as well as increases in accession volume and in the expected value per accession received prior to and during the three months ended June 30, 2017 as compared to the same period in 2016. The $191,000 in incremental net revenues recognized was primarily related to an increase in the expected value per accession received prior to and during the three months ended June 30, 2017 as compared to the same period in 2016, as well as the increasing commercial case volumes received, as follows:

	Three months ended June 30,		Change	
	2016	2017	# / $	%
# Commercial accessions received	966	1,005	39	4%
$ Value estimated per commercial accession received	$ 1,140	$ 1,196	$ 56	5%

The $17,000 increase in development services revenues during the three months ended June 30, 2017 as compared to the same period in 2016 was primarily related to increasing development services case volumes delivered, as follows:

	Three months ended June 30,		Change	
	2016	2017	#	%
# Development services cases delivered	146	233	87	60%

Costs and Expenses

Cost of Revenues. Cost of revenues was approximately $2,369,000 for the three months ended June 30, 2017, compared with approximately $1,669,000 for the three months ended June 30, 2016, an increase of $700,000, or 42%. The increase was primarily attributable to an increase of $402,000 in personnel and travel costs mainly related to higher assay volume as the average number of laboratory and manufacturing employees increased from an average of 23 employees during the three months ended June 30, 2016 to 38 employees during the same period in 2017, as we created excess laboratory accession throughput capacity of approximately 35% as

of June 30, 2017 in advance of an anticipated increase in accession volumes resulting from our expanded sales force. Additionally, there was an inc rease of $148,000 in depreciation expense, computer equipment, software amortization, and allocated information technology and facility charges as we invest in upgrading our laboratory equipment and information system and maintaining our facility, an incre ase of $130,000 in materials, shipping and other direct costs due to increased assay volume, as well as an increase of $20,000 related to fewer laboratory costs charged to research and development.

Research and Development Expenses. Research and development expenses were approximately $842,000 for the three months ended June 30, 2017, compared with approximately $716,000 for the three months ended June 30, 2016, an increase of $126,000, or 18%. The increase was primarily attributable to an increase of $101,000 in higher personnel and travel costs as the average headcount in our research and development function increased to 12 employees during the three months ended June 30, 2017 from 9 employees during the same period in 2016, as we focus on the development and deployment of next generation sequencing, support and implementation of data-intensive laboratory processes, and new product validations. Additionally, an increase of $45,000 in materials and other costs associated with research and development activities was partially offset by a decrease of $20,000 in fewer laboratory costs charged to research and development.

General and Administrative Expenses. General and administrative expenses were approximately $1,798,000 for the three months ended June 30, 2017, compared with approximately $1,518,000 for the three months ended June 30, 2016, an increase of $280,000, or 18%. The increase was primarily due to an increase of $292,000 in non-stock compensation personnel and travel costs as the average number of employees included in the general and administrative function rose from 8 employees during the three months ended June 30, 2016 to 14 employees during the same period in 2017, primarily resulting from bringing our billing function in-house in April 2017. Additionally, an increase of $47,000 during the three months ended June 30, 2017 in external independent audit and accounting fees primarily associated with the commencement of recognition of commercial revenues on an accrual basis on March 31, 2017 was partially offset by a decrease of $51,000 in stock-based compensation expense.

Sales and Marketing Expenses. Sales and marketing expenses were approximately $1,747,000 for the three months ended June 30, 2017, compared with approximately $1,292,000 for the three months ended June 30, 2016, an increase of $455,000, or 35%. The increase was primarily attributable to an increase of $336,000 in personnel and travel costs as the average number of employees included in the sales and marketing function rose from 15 employees during the three months ended June 30, 2016 to 23 employees during the same period in 2017 as we expand our sales force, and increases of $49,000 in computer equipment, allocated information technology costs, shipping and other office expenses, $44,000 in marketing materials, trade show and conference costs, and $26,000 in third party service provider and consulting costs, all associated with expanded commercial activities.

Income Taxes

Over the past several years we have generated operating losses in all jurisdictions in which we may be subject to income taxes. As a result, we have accumulated significant net operating losses and other deferred tax assets. Because of our history of losses and the uncertainty as to the realization of those deferred tax assets, a full valuation allowance has been recognized. We do not expect to report a provision for income taxes until we have a history of earnings, if ever, that would support the realization of our deferred tax assets.

We have not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since our formation, due to the complexity and cost associated with such a study, and the fact that there may be additional ownership changes in the future , however, we believe ownership changes likely occurred during both 2015 and 2016 . As a result, we have estimated that the use of our net operating loss is limited and the remaining net operating loss carryforwards and research and development credits we estimate can be used in the future remain fully offset by a valuation allowance to reduce the net asset to zero.

Six Months Ended June 30, 2016 and 2017

The following table sets forth certain information concerning our results of operations for the periods shown:

	Six months ended June 30,		Change	
	2016	2017	$	%
(dollars in thousands)				
Net revenues	$ 884	$ 2,962	$ 2,078	235%
Cost of revenues	3,144	4,498	1,354	43%
Research and development expenses	1,444	1,599	155	11%
General and administrative expenses	3,005	3,705	700	23%
Sales and marketing expenses	2,597	3,025	428	16%
Loss from operations	(9,306)	(9,865)	(559)	6%
Interest expense	(238)	(297)	(59)	25%
Other income	77	38	(39)	(51%)
Loss before income taxes	(9,467)	(10,124)	(657)	7%
Income tax expense	(2)	(2)	—	—
Net loss	$ (9,469)	$ (10,126)	$ (657)	7%

Net Revenues

Net revenues were approximately $2,962,000 for the six months ended June 30, 2017, compared with approximately $884,000 for the same period in 2016, an increase of $2,078,000, or 235%. Of the $2,962,000 of revenues recognized during the six months ended June 30, 2017, $1,762,000 related to revenues recognized on an accrual basis, while $1,056,000 related to revenues recognized upon the receipt of cash, as compared to the same period in 2016 when $98,000 of revenues were recognized on an accrual basis and $786,000 of revenues were recognized upon the receipt of cash. During the three months ended March 31, 2017, we converted from cash-based revenue recognition for our commercial revenues, to accrual-based revenue recognition. As a result of the change to accrual-based revenue recognition, we recognized total nonrecurring revenue of $1,012,000 during the six months ended June 30, 2017 for cases delivered on or prior to December 31, 2016, and the incremental revenue as a result of the change to accrual-based revenue recognition for commercial cases was $917,000.

Total cash collections for commercial cases were $1,901,000 during the six months ended June 30, 2017 as compared to $786,000 during the same period in 2016, an increase of $1,115,000 owed primarily to improvements in billing and collection timeliness and effectiveness, as well as increases in accession volume and the expected value per accession received prior to and during the six months ended June 30, 2017 as compared to the same period in 2016. The $917,000 in incremental net revenues recognized was primarily related to an increase in the expected value per accession received prior to and during the six months ended June 30, 2017 as compared to the same period in 2016, as well as the increasing commercial case volumes received, as follows:

	Six months ended June 30,		Change	
	2016	2017	# / $	%
# Commercial accessions received	1,706	1,938	232	14%
$ Value estimated per commercial accession received	$ 1,049	$ 1,131	$ 82	8%

The $46,000 increase in development services revenues during the six months ended June 30, 2017 as compared to the same period in 2016 was primarily related to increasing development services case volumes delivered, as follows:

	Six months ended June 30,		Change	
	2016	2017	#	%
# Development services cases delivered	223	397	174	78%

Costs and Expenses

Cost of Revenues. Cost of revenues was approximately $4,498,000 for the six months ended June 30, 2017, compared with approximately $3,144,000 for the six months ended June 30, 2016, an increase of $1,354,000, or 43%. The increase was primarily attributable to an increase of $842,000 in personnel and travel costs mainly related to higher assay volume as the average number of laboratory and manufacturing employees increased from an average of 23 employees during the six months ended June 30, 2016 to 36 employees during the same period in 2017, as we created excess laboratory accession throughput capacity of approximately 35% as of June 30, 2017 in advance of an anticipated increase in accession volumes resulting from our expanded sales force. Additionally, there was an increase of $259,000 in depreciation expense, computer equipment, software amortization, and allocated information

technology and facility charges as we invest in upgradi ng our laboratory equipment and information system and maintaining our facility, an increase of $150,000 in materials, shipping and other direct costs due to increased assay volume, an increase of $53,000 related to fewer laboratory costs charged to resear ch and development, and an increase of $50,000 related to third party service provider and consulting costs associated with higher assay volume.

Research and Development Expenses. Research and development expenses were approximately $1,599,000 for the six months ended June 30, 2017, compared with approximately $1,444,000 for the six months ended June 30, 2016, an increase of $155,000, or 11%. The increase was primarily attributable to an increase of $110,000 in higher personnel and travel costs as the average headcount in our research and development function increased to 11 employees during the six months ended June 30, 2017 from 9 employees during the same period in 2016, as we focus on the development and deployment of next generation sequencing, support and implementation of data-intensive laboratory processes, and new product validations. Additional increases of $78,000 in materials and other costs associated with research and development activities and $20,000 in allocated facilities charges were partially offset by a decrease of $53,000 in fewer laboratory costs charged to research and development.

General and Administrative Expenses. General and administrative expenses were approximately $3,705,000 for the six months ended June 30, 2017, compared with approximately $3,005,000 for the six months ended June 30, 2016, an increase of $700,000, or 23%. The increase was primarily due to an increase of $533,000 in non-stock compensation personnel costs and travel expenses as the average number of employees included in the general and administrative function rose from 8 employees during the six months ended June 30, 2016 to 13 employees during the same period in 2017, primarily resulting from bringing our billing function in-house in April 2017. Additionally, there was an increase of $157,000 in third party service provider and consulting fees associated with increased commercial activities and our expanded investor relations and corporate strategy functions during the six months ended June 30, 2017, an increase of $79,000 in computer equipment, allocated facilities charges, office expenses, and other general and administrative costs associated with increased commercial activities, an increase of $60,000 in legal costs, an increase of $45,000 in third party billing provider costs due to higher cash collections, as well as an increase of $38,000 in external independent audit and accounting fees primarily associated with the commencement of recognition of commercial revenues on an accrual basis on March 31, 2017, which were partially offset by decreases of $110,000 in directors and officers insurance costs and $102,000 in stock-based compensation expense.

Sales and Marketing Expenses. Sales and marketing expenses were approximately $3,025,000 for the six months ended June 30, 2017, compared with approximately $2,597,000 for the six months ended June 30, 2016, an increase of $428,000, or 16%. The increase was primarily attributable to an increase of $353,000 in personnel and travel costs as the average number of employees included in the sales and marketing function rose from 15 employees during the six months ended June 30, 2016 to 20 employees during the same period in 2017 as we expand our sales force, and increases associated with expanded commercial activities of $51,000 in computer equipment, allocated information technology costs, shipping and other office expenses, and $24,000 in marketing materials, trade show and conference costs.

Income Taxes

Over the past several years we have generated operating losses in all jurisdictions in which we may be subject to income taxes. As a result, we have accumulated significant net operating losses and other deferred tax assets. Because of our history of losses and the uncertainty as to the realization of those deferred tax assets, a full valuation allowance has been recognized. We do not expect to report a provision for income taxes until we have a history of earnings, if ever, that would support the realization of our deferred tax assets.

We have not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since our formation, due to the complexity and cost associated with such a study, and the fact that there may be additional ownership changes in the future , however, we believe ownership changes likely occurred during both 2015 and 2016 . As a result, we have estimated that the use of our net operating loss is limited and the remaining net operating loss carryforwards and research and development credits we estimate can be used in the future remain fully offset by a valuation allowance to reduce the net asset to zero.

Liquidity and Capital Resources

Cash Flows

Our net cash flow from operating, investing and financing activities for the periods below were as follows:

	Six months ended June 30,	
	2016	2017
(dollars in thousands)		
Cash provided by/ (used in):		
Operating activities	$ (8,294)	$ (8,947)
Investing activities	(324)	(527)
Financing activities	3,548	14,865
Net increase/ (decrease) in cash	$ (5,070)	$ 5,391

Cash Used in Operating Activities . Net cash used in operating activities was approximately $8,947,000 for the six months ended June 30, 2017, compared to net cash used in operating activities of approximately $8,294,000 for six months ended June 30, 2016. The net increase of $653,000 was primarily related to an increase of $656,000 in cash used to fund our net loss, as well as a net increase of $104,000 in cash used to fund operating assets and liabilities, partially offset by a $107,000 increase in non-cash depreciation and amortization, inventory reserve, interest and stock-based compensation expenses.

Cash Used in Investing Activities . Net cash used in investing activities of approximately $527,000 and $324,000 during the six months ended June 30, 2017 and 2016, respectively, was related to purchases of fixed assets.

Cash Provided by Financing Activities . Net cash provided by financing activities was $14.9 million for the six months ended June 30, 2017, compared to net cash provided by financing activities of $3.5 million for the six months ended June 30, 2016. Our primary sources of cash from financing activities during the six months ended June 30, 2017 consisted of $8.6 million in net proceeds from our offering in March 2017, as well as proceeds of $7.5 million from the exercise of common stock warrants sold in our offering in October 2016, which were partially offset by $1.2 million of principal payments made on indebtedness. Our primary sources of cash from financing activities during the six months ended June 30, 2016 related to $4.3 million in net proceeds from our offering in May 2016 as well as $0.3 million in net proceeds received from the sale of common stock to Aspire Capital, which were partially offset by $1.1 million of principal payments made on indebtedness.

Capital Resources and Expenditure Requirements

We expect to continue to incur substantial operating losses in the future. It may take several years to achieve positive operational cash flow or we may not ever achieve positive operational cash flow. We expect that we will use the net proceeds from our sale of equity securities, if any, cash received from the licensing of our technology, if any, and our revenues from operations to hire sales and marketing personnel, support increased sales and marketing activities, fund further research and development, clinical utility studies and future enhancements of our assays, acquire equipment, implement automation and scale our capabilities to prepare for significant assay volume, for general corporate purposes and to fund ongoing operations and the expansion of our business, including the increased costs associated with expanded commercial activities. We may also use the net proceeds from our sale of equity securities, if any, cash received from the licensing of our technology, if any, and our revenues from operations to acquire or invest in businesses, technologies, services or products, although we do not have any current plans to do so.

As of June 30, 2017, our cash totaled $10.0 million, and our outstanding net indebtedness totaled $3.8 million. While we currently are in the commercialization stage of operations, we have not yet achieved profitability and anticipate that we will continue to incur net losses for the foreseeable future. Management expects that we will need additional financing to execute on our current or future business strategies beyond January 2018.

Subsequent to the closing of a follow-on offering in February 2015, cash proceeds of approximately $9.8 million have been received from the exercise of warrants sold in that offering, while approximately $2.7 million in gross warrant proceeds remain outstanding and available to be exercised at $4.68 per share until their expiration in February 2020.

In May 2015, the SEC declared effective a shelf registration statement filed by us. The shelf registration statement allows us to issue any combination of our common stock, preferred stock, debt securities and warrants from time to time for an aggregate initial offering price of up to $50 million, subject to certain limitations for so long as our public float is less than $75 million. Pursuant to an exclusive placement agent agreement dated April 25, 2016 between us and H.C. Wainwright & Co., LLC, or Wainwright, and a securities purchase agreement dated April 29, 2016 between us and the purchasers signatory thereto, we received approximately $4.3 million of net cash proceeds upon the sale of our common stock and warrants to purchase our common stock. Subsequent to the closing of this offering on May 4, 2016, no warrants sold in this offering have been exercised, with approximately $4.5 million in gross warrant

proceeds remaining outstanding and available to be exercised at $3.90 per share until their expiration in May 2021. Pursuant to an exclusive placement agen t agreement dated March 28, 2017 between us and Roth Capital Partners, LLC as lead placement agent, and WestPark Capital and Chardan Capital as co-placement agents, a securities purchase agreement for an offering of 4,320,000 shares of our common stock was effected under this registration statement at a per share price of $2.15. In a concurrent private placement, we sold unregistered warrants to purchase up to an aggregate of 2,160,000 shares of our common stock that closed concurrently with the offering co mmon stock sold pursuant to this shelf registration statement. All warrants sold in this offering have a per share exercise price of $2.50, are exercisable beginning on the six-month anniversary of the date of issuance, and expire five years from the date first exercisable. The closing of the sale of these securities to the purchasers occurred on March 31, 2017, when we received approximately $8.6 million of net cash proceeds. In connection with the closing of this offering, we have agreed to certain contra ctual terms that limit our ability to issue variable rate securities for a period of one year following the closing of this offering, with certain exceptions. The specific terms of additional future offerings, if any, under this shelf registration statemen t would be established at the time of such offerings.

On October 19, 2016, we received net cash proceeds of approximately $9.0 million as a result of the closing of a follow-on public offering. Subsequent to the closing of this offering on October 19, 2016, the offering's underwriters exercised their overallotment option to purchase 627,131 option warrants for total proceeds of $564. Subsequent to December 31, 2016, approximately $7.5 million of additional cash proceeds had been received from the exercise of warrants sold in this offering, with approximately $3.2 million in gross warrant proceeds remaining outstanding and available to be exercised at $1.10 per share until their expiration in October 2021.

Pursuant to a common stock and warrant purchase agreement dated August 9, 2017, we received net cash proceeds of approximately $2.0 million as a result of the sale of our common stock and warrants. Subsequent to the closing of this offering, no additional cash proceeds had been received from the exercise of warrants sold in this offering, with approximately $2.2 million in gross warrant proceeds remaining outstanding and available to be exercised at $1.50 per share until their expiration in August 2022.

We expect that we will need additional financing to execute on our current or future business strategies. Until we can generate significant cash from operations, including assay revenues, we expect to continue to fund operations with the proceeds from offerings of our equity securities or debt, or transactions involving product development, technology licensing or collaboration. For example, we have an effective shelf registration statement on file with the SEC which allows us to issue any combination of our common stock, preferred stock, debt securities and warrants from time to time, subject to certain restrictions that apply for so long as our public float is less than $75 million. In connection with our offering in March 2017, we have agreed to certain contractual terms that limit our ability to issue variable rate securities for a period of one year, subject to certain exceptions. The specific terms of additional future offerings, if any, under this shelf registration statement would be established at the time of such offerings. We can provide no assurances that any sources of a sufficient amount of financing will be available to us on favorable terms, if at all. If we are unable to raise a sufficient amount of financing in a timely manner, we would likely need to scale back our general and administrative activities and certain of our research and development activities. Our forecast pertaining to our current financial resources and the costs to support our general and administrative and research and development activities are forward-looking statements and involve risks and uncertainties. Actual results could vary materially and negatively as a result of a number of factors, including:

- our ability to secure financing and the amount thereof;
- the costs of operating and enhancing our laboratory facilities;
- the costs of developing our anticipated internal sales and marketing capabilities;
- the scope, progress and results of our research and development programs, including clinical utility studies;
- the scope, progress, results, costs, timing and outcomes of the clinical utility studies for our cancer diagnostic assays;
- our ability to manage the costs for manufacturing our microfluidic channels;
- the costs of maintaining, expanding and protecting our intellectual property portfolio, including potential litigation costs and liabilities;
- our ability to obtain adequate reimbursement from governmental and other third-party payers for our assays and services;
- the costs of additional general and administrative personnel, including accounting and finance, legal and human resources, as a result of becoming a public company;
- our ability to collect revenues; and
- other risks discussed in our other filings with the SEC.

We may raise additional capital to fund our current operations and to fund expansion of our business to meet our long-term business objectives through public or private equity offerings, debt financings, borrowings or strategic partnerships coupled with an investment in our company or a combination thereof. If we raise additional funds through the issuance of convertible debt securities, or other debt

securities, these securities could be secured and could have rights senior to those of our common stock. In addition, any new debt incurred by us could impose covenants that restrict our operations. The issuance of any new equity securities will also dilute the interest of our current stockholders. Given the risks associated with our business, including our unp rofitable operating history and our ability or inability to develop additional assays, additional capital may not be available when needed on acceptable terms, or at all. If adequate funds are not available, we will need to curb our expansion plans or limi t our research and development activities, which would have a material adverse impact on our business prospects and results of operations.

Off-Balance Sheet Arrangements

We have not engaged in any off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K.

Critical Accounting Policies and Significant Judgments and Estimates

For a discussion of accounting policies that we consider critical to our business operations and understanding of our results of operations, and that affect the more significant judgments and estimates used in the preparation of our financial statements, please see the information listed below, along with the information listed in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates" contained in our Annual Report on Form 10-K for the year ended December 31, 2016. Except as provided below, there have been no material changes to our critical accounting policies and estimates from the information provided in our Annual Report on Form 10-K for the year ended December 31, 2016.

Revenue Recognition and Related Reserves

Our commercial revenues are generated from diagnostic services provided to physicians and billed to third-party insurance payers such as managed care organizations, Medicare and Medicaid and patients for any deductibles, coinsurance or copayments that may be due. We recognize revenue in accordance with the provision of ASC 954-605, Health Care Entities—Revenue Recognition, which requires that four basic criteria must be met prior to recognition of revenue: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred and title and the risks and rewards of ownership have been transferred to the client or services have been rendered; (3) the price is fixed or determinable; and (4) collectability is reasonably assured. Commencing on March 31, 2017, we recognize commercial revenue related to billings for assays delivered and billed to Medicare and other third-party payers on an accrual basis when amounts that will ultimately be realized can be estimated upon delivery, whereby prior to March 31, 2017, we recognized revenues for our commercial diagnostic services on a cash basis as collected because the amounts ultimately expected to be received could not be estimated upon delivery due to insufficient collection history experience.

We bill third-party payers on a fee-for-service basis at our list price and third-party commercial revenue is recorded net of contractual discounts, payer-specific allowances and other reserves. Our development services revenues are supported by contractual agreements and generated from assay development services provided to entities, as well as certain other diagnostic services provided to physicians. Diagnostic services are completed upon the delivery of assay results to the prescribing physician, at which time we bill for the service.

Our gross commercial revenues billed are subject to estimated deductions for such contractual discounts, payer-specific allowances and other reserves to arrive at reported net revenues, which relate to differences between amounts billed and corresponding amounts estimated to be subsequently collected. These third-party payer discounts and sales allowances are estimated based on a number of assumptions and factors, including historical payment trends, seasonality associated with the annual reset of patient deductible limits on January 1 of each year, and current and estimated future payments. Specifically, we maintain four such reserves: the reserve for contractual discounts, the reserve for aged non-patient receivables, the reserve for estimated patient receivables, and the reserve for other payer-specific sales allowances. The reserve for contractual discounts relates to discounts to gross amounts billed to Medicare and contracted third-party payers to arrive at the deemed "allowed expense" amount covered by that payer. Our contracted third-party commercial sales are recorded using an actual or contracted fee schedule at the time of sale, while estimated fee schedules are maintained for each non-contracted payer separately as part of other payer-specific sales allowances. Contractual discounts are recorded at the transaction level at the time of sale based on a fee schedule that is maintained for each contracted third-party payer. We periodically adjust fee schedules for both contracted and non-contracted third-party payers based upon historical payment trends. The reserve for aged non-patient receivables reduces gross amounts billed to non-contracted third-party payers for amounts estimated to be collected according to the age of the outstanding balance. The reserve for estimated patient receivables reduces gross amounts billed to third-party payers for amounts estimated to be collected directly from individual patients, such as copayments, deductibles, or amounts otherwise designated as patient responsibility. The reserve for other payer-specific sales allowances relates to the amounts billed to non-contracted third-party payers that are estimated to not be covered by that specific payer's coverage policies, as well as estimated necessary adjustments to gross amounts billed based on historical collection experience for a particular third-party payer unrelated to the age of outstanding balances.

The estimates of amounts that will ultimately be realized from commercial diagnostic services require significant judgment by management. Patients do not enter into direct agreements with us that commit them to pay any portion of the cost of the tests in the event that they have not met their annual deductible limit under their insurance policy, if any, or if their insurance otherwise declines to reimburse us. Adjustments to the estimated pay ment amounts are recorded at the time of final collection and settlement of each transaction as an adjustment to commercial revenue. The estimation process used to determine third-party payer discounts and sales allowance has been applied on a consistent b asis since March 31, 2017, and no subsequent significant adjustments have been necessary to increase or decrease these discounts and allowances as a result of changes in underlying estimates.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Not applicable.

Item 4. Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, control may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

As of June 30, 2017, we carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of June 30, 2017. There were no changes in our internal control over financial reporting that occurred during the three months ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

P ART II. OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

For a discussion of our potential risks and uncertainties, please see the information listed in the item captioned “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2016. There have been no material changes to the risk factors as disclosed in the Form 10-K. You should carefully consider the risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2016, which could materially affect our business, financial position and results of operations.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Unregistered Sales of Equity Securities

None.

Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

The exhibits listed on the accompanying index to exhibits immediately preceding the exhibits are filed as part of, or hereby incorporated by reference into, this Quarterly Report.

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.

BIOCEPT, INC.
(Registrant)

Date: August 14, 2017

By: /s/ Michael W. Nall
Michael W. Nall
President, Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 14, 2017

By: /s/ Timothy C. Kennedy
Timothy C. Kennedy
Chief Financial Officer, Senior Vice President of Operations
(Principal Financial and Accounting Officer)

Exhibit Index

The exhibits listed below are hereby filed with the SEC as part of this Quarterly Report on Form 10-Q.

EXHIBITS

Exhibit No.	Description of Exhibit
3.1	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1.4 of the Registrant's Current Report on Form 8-K, filed with the SEC on February 14, 2014).
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2.1 of the Registrant's Current Report on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
3.3	Certificate of Amendment of Certificate of Incorporation (incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K, filed with the SEC on September 29, 2016).
4.1	Reference is made to Exhibits 3.1, 3.2 and 3.3.
4.2	Amended and Restated Investor Rights Agreement, dated as of October 31, 2011, among the Registrant and certain investors named therein (incorporated by reference to Exhibit 10.12 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.3	Specimen Common Stock certificate of Biocept, Inc. (incorporated by reference to Exhibit 4.3 of the Registrant's Annual Report on Form 10-K, filed with the SEC on March 28, 2017).
4.4	Form of Representative's Warrant, dated February 10, 2014 (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), as amended, filed with the SEC on November 20, 2013).
4.5	Form of Warrant issued to the lenders under the Loan and Security Agreement, dated as of April 30, 2014, by and among Biocept, Inc., Oxford Finance LLC, as collateral agent, and the lenders party thereto from time to time, including Oxford Finance LLC (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, filed with the SEC on May 6, 2014).
4.6	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.5 of the Registrant's Registration Statement on Form S-1 (File No. 333-201437), filed with the SEC on February 6, 2015).
4.7	Warrant to Purchase Preferred Stock, dated September 10, 2012, issued by the Registrant in favor of ARE-SD Region No. 18, LLC (incorporated by reference to Exhibit 10.11.3 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.8	Warrant to Purchase Common Stock, dated September 10, 2013, issued by the Registrant in favor of ARE-SD Region No. 18, LLC (incorporated by reference to Exhibit 10.11.6 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.9	Warrant to Purchase Preferred Stock dated as of January 21, 2009, issued by the Registrant in favor of Goodman Co. Ltd. (incorporated by reference to Exhibit 10.17.1 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.10	Warrant to Purchase Common Stock dated as of July 31, 2013, issued by the Registrant in favor of Goodman Co. Ltd. (incorporated by reference to Exhibit 10.17.3 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.11	Form of Warrant to Purchase Preferred Stock, issued by the Registrant in favor of various investors under the Note and Warrant Purchase Agreement dated as of January 13, 2012 (incorporated by reference to Exhibit 10.19.3 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.12	Form of Amendment of Warrant to Purchase Preferred Stock, dated as of September 13, 2013 (incorporated by reference to Exhibit 10.19.4 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.13	Form of Warrant to Purchase Common Stock, issued by the Registrant in favor of various investors under the Note and Warrant Purchase Agreement dated as of June 28, 2013 (incorporated by reference to Exhibit 10.20.2 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).
4.14	Form of Warrant to Purchase Common Stock, issued by the Registrant in favor of various guarantors under the Reimbursement Agreement dated as of July 11, 2013 (incorporated by reference to Exhibit 10.21.1 of the Registrant's Registration Statement on Form S-1 (File No. 333-191323), filed with the SEC on September 23, 2013).

Exhibit No.	Description of Exhibit
4.15	Form of Common Stock Purchase Warrant issued to the investors under the Securities Purchase Agreement, dated April 29, 2016, by and among Biocept, Inc. and the purchasers signatory thereto (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, filed with the SEC o n April 29, 2016).
4.16	Form of Warrant to Purchase Common Stock (incorporated by reference to Exhibit 4.16 of the Registrant's Post-Effective Amendment to Registration Statement on Form S-1 (File No. 333-213111), filed with the SEC on October 14, 2016) .
4.17	Form of Common Stock Purchase Warrant issued to the investors under the Securities Purchase Agreement, dated March 28, 2017, by and among Biocept, Inc. and the purchasers signatory thereto (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, filed with the SEC on March 30, 2017).
4.18	Common Stock Purchase Warrant issued by the Registrant in favor of Ally Bridge LB Healthcare Master Fund Limited under the Common Stock and Warrant Purchase Agreement dated August 9, 2017 (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, filed with the SEC on August 10, 2017).
10.1+	Biocept, Inc. Amended and Restated 2013 Equity Incentive Plan, Form of Stock Option Grant Notice, Option Agreement, Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit agreement for use thereunder (incorporated by reference to Exhibit 99.1 of the Registrant's Current Report on Form 8-K, filed with the SEC on May 5, 2017).
10.2	Third Amendment to Loan and Security Agreement by and among Biocept, Inc., Oxford Finance LLC, as collateral agent, and the lenders party thereto from time to time, including Oxford Finance LLC, dated as of June 28, 2017.
31.1	Certification of Michael Nall, Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Timothy Kennedy, Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Michael Nall, Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Timothy Kennedy, Chief 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 Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

+ Indicates management contract or compensatory plan.

* This certification is not deemed "filed" for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that the registrant specifically incorporates it by reference.

EXHIBIT 10.2

THIRD AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS THIRD AMENDMENT to Loan and Security Agreement (this " **Amendment** ") is entered into as of June 28, 2017 (the " **Amendment Date** "), by and among OXFORD FINANCE LLC, a Delaware limited liability company with an office located at 133 North Fairfax Street, Alexandria, Virginia 22314 (in its individual capacity, " **Oxford** "; and in its capacity as Collateral Agent, " **Collateral Agent** "), the Lenders listed on Schedule 1.1 to the Loan Agreement (as defined herein) from time to time including Oxford in its capacity as a Lender (each a " **Lender** " and collectively, the " **Lenders** ") and BIOCEPT, INC., a Delaware corporation with offices located at 5810 Nancy Ridge Drive, San Diego, California 92121 (" **Borrower** ").

WHEREAS, Collateral Agent, Borrower and Lenders party thereto from time to time have entered into that certain Loan and Security Agreement, dated as of April 30, 2014 (as amended, supplemented or otherwise modified from time to time, the " **Loan Agreement** ") pursuant to which Lenders have provided to Borrower certain loans in accordance with the terms and conditions thereof; and

WHEREAS, Borrower, Lenders and Collateral Agent desire to amend certain provisions of the Loan Agreement as provided herein and subject to the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises, covenants and agreements contained herein, and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Borrower, Lenders and Collateral Agent hereby agree as follows:

1. Capitalized terms used herein but not otherwise defined shall have the respective meanings given to them in the Loan Agreement.

2. Clause (e) of the definition of " **Permitted Indebtedness** " set forth in Section 13.1 of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

   "(e) Indebtedness consisting of capitalized lease obligations and purchase money Inde btedness, in each case incurred by Borrower or any of its Subsidiaries to finance the acquisition, repair, improvement or construction of fixed or capital assets of such person, provided that (i) the aggregate outstanding principal amount of all such Indebtedness does not exceed Three Million Dollars ($3,000,000.00) at any time and (ii) the principal amount of such Indebtedness does not exceed the lower of the cost or fair market value of the property so acquired or built or of such repairs or improvements financed with such Indebtedness (each measured at the time of such acquisition, repair, improvement or construction is made);"

3. Limitation of Amendment.

   a. The amendment set forth in Section 2 above is effective for the purposes set forth herein and shall be limited precisely as written and shall not be deemed to (a) be a consent to any amendment, waiver or modification of any other term or condition of any Loan Document, or (b) otherwise prejudice any right or remedy which Lenders may now have or may have in the future under or in connection with any Loan Document.

   b. This Amendment shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents, except as herein amended, are hereby ratified and confirmed and shall remain in full force and effect.

4. To induce Collateral Agent and Lenders to enter into this Amendment, Borrower hereby represents and warrants to Collateral Agent and Lenders as follows:

   a. Immediately after giving effect to this Amendment (a) the representations and warranties contained in the Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent such representations and warranties relate to an earlier date, in

which case they are true and correct in all material respects as of such date), and (b) no Event of Default has occurred and is continuing;

b. Borrower has the power and due authority to execute and deliver this Amendment and to perform its obligations under the Loan Agreement, as amended by this Amendment;

c. The organizational documents of Borrower delivered to Collateral Agent on the Effective Date remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

d. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not and will not contravene (i) any law or regulation binding on or affecting Borrower, (ii) any contractual restriction with a Person binding on Borrower, (iii) any order, judgment or decree of any court or other governmental or public body or authority, or subdivision thereof, binding on Borrower, or (iv) the organizational documents of Borrower;

e. The execution and delivery by Borrower of this Amendment and the performance by Borrower of its obligations under the Loan Agreement, as amended by this Amendment, do not require any order, consent, approval, license, authorization or validation of, or filing, recording or registration with, or exemption by any governmental or public body or authority, or subdivision thereof, binding on Borrower, except as already has been obtained or made; and

f. This Amendment has been duly executed and delivered by Borrower and is the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights.

5. Except as expressly set forth herein, the Loan Agreement shall continue in full force and effect without alteration or amendment. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements.

6. This Amendment shall be deemed effective as of the Amendment Date upon (a) the due execution and delivery to Collateral Agent of this Amendment by each party hereto and (b) Borrower's payment of all Lenders' Expenses incurred through the date hereof, which may be debited from any of Borrower's accounts with Lenders.

7. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument.

8. This Amendment and the rights and obligations of the parties hereto shall be governed by and construed in accordance with the laws of the State of California.

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IN WITNESS WHEREOF , the parties hereto have caused this Thi rd Amendment to Loan and Security Agreement to be executed as of the date first set forth above.

BORROWER:

BIOCEPT, INC.

By: /s/ Timothy Kennedy
Name: Timothy Kennedy
Title: Chief Financial Officer, SVP of Operations

COLLATERAL AGENT AND LENDER:

OXFORD FINANCE LLC

By: /s/ Colette Hastings Featherly
Name: Colette Hastings Featherly
Title: SVP, Corporate Finance & Planning

EXHIBIT 31.1

CERTIFICATION

I, Michael W. Nall, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Biocept, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: August 14, 2017

/s/ Michael W. Nall

Michael W. Nall
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION

I, Timothy Kennedy, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Biocept, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: August 14, 2017

/s/ Timothy Kennedy
Timothy Kennedy
Chief Financial Officer, Senior Vice President of Operations
(Principal Financial and Accounting Officer)

EXHIBIT 32.1

CERTIFICATION

I, Michael W. Nall, hereby certify pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that, to my knowledge, the Quarterly Report on Form 10-Q of Biocept, Inc. for the period ended June 30, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Biocept, Inc.

Date: August 14, 2017

/s/ Michael W. Nall
Michael W. Nall
President and Chief Executive Officer
(Principal Executive Officer)

This certification accompanies the Report pursuant to Rule 13a-14(b) or Rule 15d-14(b) under the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934.

EXHIBIT 32.2

CERTIFICATION

I, Timothy Kennedy, hereby certify pursuant to Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, that, to my knowledge, the Quarterly Report on Form 10-Q of Biocept, Inc. for the period ended June 30, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Biocept, Inc.

Date: August 14, 2017

/s/ Timothy Kennedy
Timothy Kennedy
Chief Financial Officer, Senior Vice President of Operations
(Principal Financial and Accounting Officer)

This certification accompanies the Report pursuant to Rule 13a-14(b) or Rule 15d-14(b) under the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934.