UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON D.C. 20549

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED June 30, 2017

OR

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

FOR THE TRANSITION PERIOD FROM ____ TO ____.

COMMISSION FILE NUMBER: 0-31265

MABVAX THERAPEUTICS HOLDINGS, INC.

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	93-0987903
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NO.)

11535 Sorrento Valley Road, Suite 400, San Diego, CA 92121
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES INCLUDING ZIP CODE)

(858) 259-9405
(REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE)

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

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

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer (Do not check if a smaller reporting company)	☐	Smaller reporting company	☒

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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 in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares of common stock outstanding as of August 14, 2017 was 10,563,899.

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PART 1. FINANCIAL INFORMATION

Item 1. Financial Statements

MABVAX THERAPEUTICS HOLDINGS, INC.
Condensed Consolidated Balance Sheets

	June 30, 2017 (Unaudited)	December 31, 2016 (Note 1)
Assets		
Current assets:		
Cash and cash equivalents	$ 1,846,906	$ 3,979,290
Prepaid expenses	61,043	281,858
Other current assets	88,564	32,830
Total current assets	1,996,513	4,293,978
Property and equipment, net	664,136	731,712
Goodwill	6,826,003	6,826,003
Other long-term assets	168,597	168,597
Total assets	$ 9,655,249	$ 12,020,290
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,086,650	$ 1,137,903
Accrued compensation	639,128	770,592
Accrued clinical operations and site costs	1,643,379	1,218,641
Accrued lease contingency fee	590,504	590,504
Other accrued expenses	367,389	315,034
Interest payable	45,742	51,295
Current portion of notes payable	1,666,667	1,589,661
Current portion of capital leases payable	17,726	17,004
Total current liabilities	7,057,185	5,690,634
Long-term liabilities:		
Long-term portion of notes payable, net	2,284,889	2,774,627
Long-term portion of capital lease payable	59,065	68,113
Other long-term liabilities	167,296	144,394
Total long-term liabilities	2,511,250	2,987,134
Total liabilities	9,568,435	8,677,768
Commitments and contingencies		
Stockholders' equity:		
Series D convertible preferred stock, $0.01 par value, 1,000,000 shares authorized, 98,105 and 132,489 shares issued and outstanding with a liquidation preference of $981 and $1,325 as of June 30, 2017, and December 31, 2016, respectively	981	1,325
Series E convertible preferred stock, $0.01 par value, 100,000 shares authorized, 33,333 shares issued and outstanding with a liquidation preference of $333	333	333
Series F convertible preferred stock, $0.01 par value, 1,559,252 shares authorized, 665,281 shares issued and outstanding with a liquidation preference of $6,653	6,653	6,653
Series G convertible preferred stock, $0.01 par value, 5,000,000 shares authorized, 1,000,000 and 0 issued and outstanding with a liquidation preference of $10,000 and $0 as of June 30, 2017, and December 31, 2016, respectively	10,000	—
Series H convertible preferred stock, $0.01 par value, 2,000 shares authorized, 850 and 0 shares issued and outstanding with a liquidation preference of $850,000 and $0 as of June 30, 2017, and December 31, 2016, respectively	9	—
Series I convertible preferred stock, $0.01 par value, 1,968,664 shares authorized, 1,968,664 and 0 issued and outstanding with a liquidation preference of $19,687 and $0 as of June 30, 2017, and December 31, 2016, respectively	19,687	—
Common stock, $0.01 par value; 150,000,000 shares authorized, 9,219,770 and 6,296,110 shares issued and outstanding as of June 30, 2017, and December 31, 2016, respectively	92,198	62,961
Additional paid-in capital	94,803,349	81,533,511
Accumulated deficit	(94,846,396)	(78,262,261)
Total stockholders' equity	86,814	3,342,522
Total liabilities and stockholders' equity	$ 9,655,249	$ 12,020,290

See Accompanying Notes to Condensed Consolidated Financial Statements

MABVAX THERAPEUTICS HOLDINGS, INC.
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	**2016**	**2017**	**2016**
Revenues:				
Grants	$ —	$ —	$ —	$ 148,054
Total revenues	—	—	—	148,054
Operating costs and expenses:				
Research and development	2,332,700	1,596,002	5,151,064	3,296,514
General and administrative	3,408,042	1,929,166	5,681,992	4,581,005
Total operating costs and expenses	5,740,742	3,525,168	10,833,056	7,877,519
Loss from operations	(5,740,742)	(3,525,168)	(10,833,056)	(7,729,465)
Interest and other expense	(249,126)	(262,807)	(511,666)	(463,280)
Net loss	$ (5,989,868)	$ (3,787,975)	$(11,344,722)	$ (8,192,745)
Deemed dividend on inducement shares	(5,220,000)	—	(5,220,000)	—
Deemed dividend on warrant reprice	(19,413)	—	(19,413)	—
Net loss allocable to common stockholders	$(11,229,281)	$ (3,787,975)	$(16,584,135)	$ (8,192,745)
Basic and diluted net loss per share	$ (1.47)	$ (0.92)	$ (2.37)	$ (2.03)
Shares used to calculate basic and diluted net loss per share	7,662,700	4,128,617	6,985,943	4,037,835

See Accompanying Notes to Condensed Consolidated Financial Statements

MABVAX THERAPEUTICS HOLDINGS, INC.
Condensed Consolidated Statements of Stockholders' Equity
For the Six Months Ended June 30, 2017
(Unaudited)

	Series D, E, F, G, H and I Convertible Preferred Stock		Common Stock		Additional Paid-in	Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Deficit	Equity
Balance at December 31, 2016	**831,103**	**$ 8,311**	**6,296,110**	**$ 62,961**	**$81,533,511**	**$(78,262,261)**	**$ 3,342,522**
Private placement, net of costs	850	9	—	—	820,562	—	820,571
Underwritten offering, net of costs	1,000,000	10,000	1,342,858	13,429	3,678,828	—	3,702,257
Issuance of inducement shares	1,968,664	19,687	931,336	9,313	(29,000)	—	—
Deemed dividends on inducement shares	—	—	—	—	5,220,000	(5,220,000)	—
Repricing of warrants	—	—	—	—	19,413	(19,413)	—
Stock issued for services	—	—	86,574	866	62,684	—	63,550
Preferred stock conversions	(34,384)	(344)	464,654	4,647	(4,303)	—	—
Stock issued upon vesting of RSUs	—	—	98,238	982	(982)	—	—
Stock-based compensation	—	—	—	—	3,502,636	—	3,502,636
Net loss	—	—	—	—	—	(11,344,722)	(11,344,722)
Balance at June 30, 2017	**3,766,233**	**$ 37,663**	**9,219,770**	**$ 92,198**	**$94,803,349**	**$(94,846,396)**	**$ 86,814**

See Accompanying Notes to Condensed Consolidated Financial Statements

MABVAX THERAPEUTICS HOLDINGS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	For the Six Months Ended June 30,	
	2017	**2016**
Operating activities		
Net loss	$(11,344,722)	$ (8,192,745)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	83,933	32,466
Stock-based compensation	3,502,636	2,491,451
Issuance of restricted common stock for services	63,550	64,000
Amortization and accretion related to notes payable	215,195	223,352
Increase (decrease) in operating assets and liabilities:		
Grants receivable	—	757,562
Other receivables	22,829	—
Prepaid expenses and other	146,967	56,318
Accounts payable	931,817	(877,179)
Accrued clinical operations and site costs	424,738	100,116
Accrued compensation	(131,464)	(80,227)
Other accrued expenses	59,216	199,752
Net cash used in operating activities	(6,025,305)	(5,225,134)
Investing activities		
Purchases of property and equipment	(4,142)	(316,846)
Net cash used in investing activities	(4,142)	(316,846)
Financing activities		
Cash receipt from bank loan, net of financing costs	—	4,610,324
Private offering, net of issuance costs	820,571	—
Underwritten offering, net of issuance costs	3,702,257	—
Principal payments on bank loan	(555,556)	—
Principal payments on financed insurance policies	(61,883)	—
Principal payments on capital lease	(8,326)	(2,555)
Purchase of vested employee stock in connection with tax withholding obligation	—	(177,823)
Net cash provided by financing activities	3,897,063	4,429,946
Net change in cash and cash equivalents	(2,132,384)	(1,112,034)
Cash and cash equivalents at beginning of period	3,979,290	4,084,085
Cash and cash equivalents at end of period	$ 1,846,906	$ 2,972,051
Supplemental disclosure:		
Cash paid during the period for income taxes	$ 1,600	$ 14,546
Cash paid during the period for interest on term note	$ 302,256	$ 226,029
Supplemental disclosures of non-cash investing and financing information:		
Purchase of equipment in accounts payable	$ 16,930	$ 109,471
Fair value of warrants issued	$ —	$ 607,338
Fair value of repricing of warrants issued in previous financing	$ 19,413	$ —
Deemed dividends on inducement shares	$ 5,220,000	—
Capital lease in connection with purchase of equipment	$ —	$ 95,656
Conversion of Series D preferred stock to common stock	$ 4,647	$ —

See Accompanying Notes to Condensed Consolidated Financial Statements

MABVAX THERAPEUTICS HOLDINGS, INC.
Notes to Unaudited Condensed Consolidated Financial Statements

1. Basis of Presentation

We are a Delaware corporation, originally incorporated in 1988 under the name Terrapin Diagnostics, Inc. in the State of Delaware, and subsequently renamed "Telik, Inc." in 1998, and thereafter renamed MabVax Therapeutics Holdings, Inc. ("MabVax") in September 2014. Our principal corporate office is located at 11535 Sorrento Valley Road, Suite 400, San Diego, CA 92121 telephone: (858) 259-9405. On July 8, 2014, we consummated a merger with MabVax Therapeutics, Inc. ("MabVax Therapeutics"), pursuant to which our subsidiary Tacoma Acquisition Corp. merged with and into MabVax Therapeutics, with MabVax Therapeutics surviving as our wholly owned subsidiary. This transaction is referred to as the "Merger." Unless the context otherwise requires, references to "we," "our," "us," or the "Company" in this Quarterly Report mean MabVax Therapeutics Holdings, Inc. on a condensed consolidated financial statement basis with our wholly-owned subsidiary following the Merger, MabVax Therapeutics, as applicable. Beginning October 10, 2014, our common stock was quoted on the OTCQB under the symbol "MBVX." Since August 17, 2016, our common stock has been trading on The NASDAQ Capital Market under the symbol "MBVX."

The balance sheet data at December 31, 2016, has been derived from audited financial statements at that date. It does not include, however, all the information and notes required by accounting principles generally accepted in the United States of America ("GAAP") for complete financial statements. The consolidated financial statements as presented reflect certain reclassifications from previously issued financial statements to conform to the current year presentation.

On August 16, 2016, we filed a certificate of amendment to our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware in order to effectuate a reverse stock split of our issued and outstanding common stock on a 1 for 7.4 basis, effective on August 16, 2016 (the "Reverse Stock Split"). The Reverse Stock Split was effective with The Financial Industry Regulatory Authority (FINRA) and the Company's common stock began trading on The NASDAQ Capital Market at the open of business on August 17, 2016. All share and per share amounts, and number of shares of common stock into which each share of preferred stock will convert, in the financial statements and notes thereto have been retroactively adjusted for all periods presented to give effect to the Reverse Stock Split, including reclassifying an amount equal to the reduction in par value of common stock to additional paid-in capital.

MabVax is a clinical stage biopharmaceutical company engaged in the discovery, development and commercialization of proprietary human monoclonal antibody products for the treatment of a variety of cancers. We have discovered a pipeline of human monoclonal antibody products based on the protective immune responses generated by patients who have been vaccinated against targeted cancers with our proprietary vaccines. We have the exclusive license to the vaccines from Memorial Sloan Kettering Cancer Center ("MSK"). We operate in only one business segment.

We have incurred net losses since inception and expect to incur substantial losses for the foreseeable future as we continue our research, development and clinical activities. To date, we have funded operations primarily through government grants, proceeds from the sale of common and preferred stock, the issuance of debt, the issuance of common stock in lieu of cash for services, payments from collaborators, and interest income. The process of developing products will require significant additional research and development, preclinical testing and clinical trials, as well as regulatory approvals. We expect these activities, together with general and administrative expenses, to result in substantial operating losses for the foreseeable future. We will not receive substantial revenue unless we or our collaborative partners complete clinical trials, obtain regulatory approvals and successfully commercialize one or more products; or we license our technology after achieving one or more milestones of interest to a potential partner.

The accompanying unaudited condensed consolidated financial statements were prepared using GAAP for interim financial information and the instructions to Regulation S-X. While these statements reflect all normal recurring adjustments, which are, in the opinion of management, necessary for a fair presentation of the results of the interim period, they do not include all information or notes required by GAAP for annual financial statements and should be read in conjunction with the Audited Financial Statements of MabVax Therapeutics Holdings, Inc. for the year ended December 31, 2016, filed in our Annual Report on Form 10-K on March 1, 2017.

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of expenses during the reporting period. Management believes that these estimates are reasonable; however, actual results may differ from these estimates.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)", which contains new accounting literature relating to how and when a company recognizes revenue. Under ASU 2017-09, a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. ASU 2014-09 is effective for the Company's fiscal year beginning January 1, 2018, which reflects a one year deferral approved by the FASB in July 2015, and will be adopted by the Company beginning January 1, 2018. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In February 2016, the FASB issued ASU 2016-2, "Leases (Topic 842)." This update will increase transparency and comparability by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date (i) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (ii) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged, and it simplified the accounting for sale and leaseback transactions. Lessees will no longer be provided with a source of off-balance sheet financing. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. The standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We are currently in the process of assessing what impact this new standard may have on our condensed consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, "Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." This update includes multiple provisions intended to simplify various aspects of the accounting for share-based payment transactions including accounting for excess tax benefits and tax deficiencies, classification of excess tax benefits in the statement of cash flows and accounting for award forfeitures. This update is effective for annual and interim reporting periods of public entities beginning after December 15, 2016, with early adoption permitted. The adoption of this new standard did not have a material impact on our condensed consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic326): Measurement of Credit Losses on Financial Instruments." This ASU requires instruments measured at amortized cost to be presented at the net amount expected to be collected. Entities are also required to record allowances for available-for-sale debt securities rather than reduce the carrying amount. This ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15 ("ASU 2016-15"), "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." The standard provides guidance on eight (8) cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon bonds; (3) contingent consideration payments after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. ASU 2016-15 addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017 with early adoption permitted. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory." This ASU requires the recognition of the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amendments in this ASU should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-03, "Accounting Changes and Error Corrections (Topic 250) and Investments—Equity Method and Joint Ventures (Topic 323)." This ASU amends the disclosure requirements for ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), ASU No. 2016-02, Leases (Topic 842) and ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This ASU states that if a registrant does not know or cannot reasonably estimate the impact that the adoption of the above ASUs is expected to have on the financial statements, then in addition to making a statement to that effect, the registrant should consider additional qualitative financial statement disclosures to assist the reader in assessing the significance of the impact that the standard will have on the financial statements of the registrant when adopted. This ASU was effective upon issuance. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." This ASU eliminates Step 2 from the goodwill impairment test. Instead, an entity should recognize an impairment charge for the amount by which the carrying value exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to that reporting unit. This ASU is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business." This ASU clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This ASU is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

Management believes that any other recently issued, but not yet effective, accounting standards if currently adopted would not have a material effect on the accompanying condensed consolidated financial statements.

2. Liquidity and Going Concern

The accompanying condensed consolidated financial statements have been prepared on the going concern basis, which assumes that the Company will continue to operate as a going concern and which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. As reflected in the accompanying condensed consolidated financial statements, the Company had a net loss of $11,344,722, net cash used in operating activities of $6,025,305, net cash used in investing activities of $4,142, and net cash provided by financing activities of $3,897,063 for the six months ended June 30, 2017. As of June 30, 2017, the Company had $1,846,906 in cash and cash equivalents and an accumulated deficit of $94,846,396 and stockholders' equity of $86,814.

On January 15, 2016, we and Oxford Finance LLC, as collateral agent and lender, entered into a Loan and Security Agreement providing for senior secured term loans to the Company in an aggregate principal amount of up to $10,000,000, subject to the terms and conditions set forth in the Loan Agreement (the "January 2016 Term Loan"). On January 15, 2016, the Company received an initial loan of $5,000,000 under the Loan Agreement, before fees and issuance costs of approximately $390,000. The option to draw the second $5,000,000 expired on September 30, 2016.

On March 31, 2017, we and Oxford Finance LLC, signed a First Amendment to Loan and Security Agreement ("Amendment"), providing that the payment of principal of $138,889 on the January 2016 Term Loan that otherwise would have been due on the Amortization Date of April 1, 2017, will be due and payable on May 1, 2017 along with any other payment of principal due on May 1, 2017. We were obligated to pay a fully earned and non-refundable amendment fee of $15,000 to the Collateral Agent. On May 1, 2017, we paid the principal that was due on May 1, 2017, along with the $15,000 amendment fee.

On August 22, 2016, we closed a public offering of 1,297,038 shares of common stock and 665,281 shares of Series F Convertible Preferred Stock (the "Series F Preferred Stock"), and warrants to purchase 1,962,319 shares of common stock at $5.55 per share and warrants to purchase 1,962,319 shares of common stock at $6.29 per share, at an offering price of $4.81 per share (the "August 2016 Public Offering"). For every one share of common stock or Series F Preferred Stock sold, we issued one warrant to purchase one share of common stock at $5.55 per share and one warrant to purchase one share of common stock at $6.29 per share. We received $9,438,753 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling $871,305. The gross proceeds include the underwriters' over-allotment option, which they exercised on the closing date.

On May 3, 2017, we sold 850 shares of 0% Series H Convertible Preferred Stock ("the Series H Preferred Stock"), at a stated value of $1,000 per share, representing an aggregate of $850,000 before offering costs of $29,429 in a private placement (the "May 2017 Private Placement"), to certain existing investors. The shares of Series H Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series H Preferred Stock, plus all accrued and unpaid dividends (the "Base Amount"), if any, on such Series H Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series H Preferred Stock is $1,000 and the initial conversion price is $1.75 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. This financing is discussed in further detail in Note 5, Convertible Preferred Stock, Common Stock and Warrants.

On May 19, 2017, we closed a public offering of 1,342,858 shares of common stock and 1,000,000 shares of newly designated 0% Series G Convertible Preferred Stock (the "Series G Preferred Stock"), at $1.75 per share of common stock and Series G Preferred Stock (the "May 2017 Public Offering"). The Series G Preferred Stock is initially convertible into 1,000,000 shares of common stock, subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events, to certain existing investors in the offering who, as a result of their purchases of common stock, would hold in excess of 4.99% of our issued and outstanding common stock, and elect to receive shares of our Series G Preferred Stock. We received $4,100,000 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling $397,743. The May 2017 Public Offering is described in more detail in Note 5, Convertible Preferred Stock, Common Stock and Warrants.

On July 24, 2017, the Board of Directors, or Board, authorized the Company to engage an independent financial advisory firm to assist the Company in exploring and evaluating strategic options with the goal of maximizing shareholder value. The Company will continue to work to advance its clinical programs and validate its platform technology, including the recent commencement of patient dosing in the Phase 1 MVT-1075 Radioimmunotherapy clinical trial for the treatment of pancreatic, colon and lung cancers, and remains committed to this continued progression. As part of the Company's ongoing evaluation and prioritization of its portfolio of assets, and in response to inbound inquiries, the Company plans to engage an industry-leading firm to advise us on potential alternatives and strategies that will have the potential to unlock shareholder value.

The financial advisory firm will be assisting the Company in evaluating transaction options currently being considered, which could include the acquisition of MabVax by another company, the sale or divestiture of specific assets, merging with another company, licensing of selected technologies or a combination of selected divestitures followed by a reverse merger. MabVax does not have a defined timeline for the exploration of strategic alternatives and is not confirming that the evaluation will result in any strategic alternative being announced or consummated.

On July 27, 2017, we entered into a subscription agreement with an accredited investor pursuant to which we agreed to sell an aggregate of $125,000 in common stock under terms similar to the May 2017 Public Offering. The transaction closed on August 2, 2017, as further described in Note 12, Subsequent Events.

On August 11, 2017, we entered into a security purchase agreement with a group of existing investors in the Company, where we sold 2,386.36 shares of 0% Series J Convertible Preferred Stock to be issued ("the Series J Preferred Stock"), at a stated value of $550 per share, representing an aggregate of approximately $1,312,500 before offering costs estimated at approximately $130,000 in a registered direct offering (the "August 2017 Financing"). The shares of Series J Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series J Preferred Stock plus the Base Amount on such Series J Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series J Preferred Stock is $550 and the initial conversion price is $0.55 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. This financing is discussed in further detail in Note 12, Subsequent Events.

We plan to continue to fund the Company's losses from operations and capital funding needs through equity or debt financings, strategic collaborations, licensing arrangements, government grants or other arrangements. Further, to extend availability of existing cash available for our programs for the purpose of achieving milestones or a strategic transaction, we have cut personnel and other operating expenses substantially following the completion of two clinical development programs. For example, we were able to reduce costs following completion of two phase 1a clinical trials of our lead antibody HuMab 5B1, which has enabled us to reduce our expenditures on clinical trials while we continue with our radioimmunotherapy product MVT-1075 discussed further in Management's Discussion and Analysis of Financial Condition and Results of Operations, and management has volunteered to defer receiving portions of salaries until one or more business transactions can be achieved, as discussed further in Note 12, Subsequent Events. Further, we have reduced our personnel from 25 full time employees to 13 full time employees with the completion of our two clinical trials. However, we cannot be sure that capital funding will be available on reasonable terms, or at all, and that our staff reductions to fit ongoing needs will be sufficient. If we are unable to secure adequate additional funding, we may be forced to make additional reductions in spending, incur further cutbacks in personnel, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. In addition, if the Company does not meet its payment obligations to third parties as they come due, it may be subject to litigation claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

We anticipate that the Company will continue to incur net losses into the foreseeable future as we: (i) monitor the four patients remaining on therapy in our Phase I clinical trial of MVT5873 until therapy is discontinued. (ii) continue our clinical trial for the development of MVT1075 as a radioimmunotherapy. and (iii) continue operations as a public company. Based on receipt of $850,000 from our May 2017 Private Placement, $4.1 million from the May 2017 Public Offering, the $125,000 private placement in July 2017, and the $1.3 million in securities purchase agreements signed in August 2017, and without any other additional funding or receipt of payments from potential licensing agreements, we expect we will have sufficient funds to meet our obligations through October 2017. These conditions give rise to substantial doubt as to the Company's ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Any of these actions could materially harm the Company's business, results of operations, and prospects. These conditions give rise to substantial doubt as to the Company's ability to continue as a going concern. The accompanying condensed consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

If the Company raises additional funds by issuing equity securities, substantial dilution to existing stockholders would result. If the Company raises additional funds by incurring debt financing, the terms of the debt may involve significant cash payment obligations as well as covenants and specific financial ratios that may restrict the Company's ability to operate its business.

3. Cash and Cash Equivalents

We consider all highly liquid investments purchased with original maturities of three months or less to be cash equivalents. The Company limits its exposure to credit loss by holding cash in U.S. dollars, or, from time to time, placing cash and investments in U.S. government, agency and government-sponsored enterprise obligations.

4. Fair value of financial instruments

Our financial instruments consist of cash and cash equivalents and accounts payable, both of which are generally considered to be representative of their respective fair values because of the short-term nature of those instruments.

5. Convertible Preferred Stock, Common Stock and Warrants

Dividends on Preferred Stock

We immediately recognize the changes in the redemption value on preferred stock as they occur and the carrying value of the security is adjusted to equal what the redemption amount would be as if redemption were to occur at the end of the reporting date based on the conditions that exist as of that date.

No dividends were ever declared by our Board of Directors since our inception on any series of convertible preferred stock.

Series D Preferred Stock

As of June 30, 2017, and December 31, 2016, there were 98,105 and 132,489 shares of Series D convertible preferred stock ("Series D Preferred Stock") issued and outstanding that are convertible into an aggregate of 1,325,738 and 1,790,392 shares of common stock, respectively.

The Series D Preferred Stock had been issued on March 25, 2015, to certain holders of the Company's Series A-1 Preferred Stock and Merger warrants (the "Series A-1 Exchange Securities") and holders of the Company's Series B Preferred Stock and Series B warrants (the "Series B Exchange Securities" and, collectively with the Series A-1 Exchange Securities, the "Exchange Securities"), all previously issued by the Company. Pursuant to the exchange agreements, the holders exchanged the Exchange Securities and relinquished any and all other rights they may have had pursuant to the Exchange Securities, their respective governing agreements and certificates of designation, including any related registration rights, in exchange for an aggregate of 342,906 shares of the Company's common stock and an aggregate of 238,156 shares of the Company's newly designated Series D Preferred Stock, convertible into 3,218,325 shares of common stock.

As contemplated by the exchange agreements and as approved by the Company's Board of Directors, the Company filed with the Secretary of State of the State of Delaware a Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock (the "Series D Certificate of Designations"), on March 25, 2015. Pursuant to the Series D Certificate of Designations, the Company designated 1,000,000 shares of its blank check preferred stock as Series D Preferred Stock. Each share of Series D Preferred Stock has a stated value of $0.01 per share. In the event of a liquidation, dissolution or winding up of the Company, each share of Series D Preferred Stock will be entitled to a per share preferential payment equal to the stated value. Each share of Series D Preferred Stock is convertible into 13.5135 shares of common stock. The conversion ratio is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Company is prohibited from effecting the conversion of the Series D Preferred Stock to the extent that, as a result of such conversion, the holder beneficially would own more than 4.99% (provided that certain investors elected to block their beneficial ownership initially at 2.49% in the Exchange Agreements), in the aggregate, of the issued and outstanding shares of the Company's common stock calculated immediately after giving effect to the issuance of shares of common stock upon the conversion of the Series D Preferred Stock. Each share of Series D Preferred Stock entitles the holder to vote on all matters voted on by holders of common stock. With respect to any such vote, each share of Series D Preferred Stock entitles the holder to cast such number of votes equal to the number of shares of common stock such shares of Series D Preferred Stock are convertible into at such time, but not in excess of the beneficial ownership limitations.

Series E Preferred Stock

As of June 30, 2017, and December 31, 2016, there were 33,333 shares of Series E convertible preferred stock ("Series E Preferred Stock") issued and outstanding, convertible into 519,751 shares of common stock.

On March 30, 2015, the Company filed with the Secretary of State of the State of Delaware a Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock (the "Series E Certificate of Designations") to designate 100,000 shares of its blank check preferred stock as Series E Preferred Stock.

The shares of Series E Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of such preferred share, plus all accrued and unpaid dividends, if any, on such share of Series E Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series E Preferred Stock is $75 and the initial conversion price is $5.55 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. In addition, during the period proscribed for in the Series E Certificate of Designations, in the event the Company issues or sells, or is deemed to issue or sell, shares of common stock at a per share price that is less than the conversion price then in effect, the conversion price shall be reduced to such lower price, subject to certain exceptions. The Company is prohibited from effecting a conversion of the share of Series E Preferred Stock to the extent that, as a result of such conversion, such holder would beneficially own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series E Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99%. Each holder is entitled to vote on all matters submitted to stockholders of the Company, and shall have the number of votes equal to the number of shares of common stock issuable upon conversion of such holder's share of Series E Preferred Stock, but not in excess of beneficial ownership limitations. The shares of Series E Preferred Stock bear no interest.

On August 22, 2016, when the Company closed on the August 2016 Public Offering, the current Series E Preferred Stock conversion price of $5.55 per share was reduced to $4.81 per share under the terms of the Series E Certificate of Designations, resulting in an increase in the number of shares of common stock to 519,751 that the Series E Preferred Stock may be converted into. There is no further adjustment required by the Series E Certificate of Designations in the event of an offering of shares below $4.81 per share by the Company.

Series F Preferred Stock

As of June 30, 2017, and December 31, 2016, there were 665,281 shares of Series F Preferred Stock, par value of $0.01 per share, issued and outstanding, convertible into 665,281 shares of common stock. In the event of a liquidation, dissolution or winding up of the Company, each share of Series F Preferred Stock will be entitled to a per share preferential payment equal to the par value.

On August 16, 2016, we filed a Certificate of Designations, Preferences and Rights of the 0% Series F Convertible Preferred Stock with the Delaware Secretary of State, designating 1,559,252 shares of preferred stock as 0% Series F Preferred Stock.

The shares of Series F Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of such Series F Preferred Stock, plus all accrued and unpaid dividends, if any, on such Series F Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series F Preferred Stock is $4.81 and the initial conversion price is $4.81 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. In the event of a liquidation, dissolution or winding up of the Company, each share of Series F Preferred Stock will be entitled to a per share preferential payment equal to the par value. All shares of the Company's capital stock will be junior in rank to Series F Preferred Stock with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company, except for the Company's Series D Preferred Stock and Series E Preferred Stock.

The holders of Series F Preferred Stock will be entitled to receive dividends if and when declared by our Board of Directors. The Series F Preferred Stock shall participate on an "as converted" basis, with all dividends declared on the Company's common stock. In addition, if we grant, issue or sell any rights to purchase our securities pro rata to all our record holders of our common stock, each holder will be entitled to acquire such securities applicable to the granted purchase rights as if the holder had held the number of shares of common stock acquirable upon complete conversion of all Series F Preferred Stock then held.

We are prohibited from effecting a conversion of the Series F Preferred Stock to the extent that, as a result of such conversion, the holder would beneficially own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series F Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99%. Each holder is entitled to vote on all matters submitted to stockholders of the Company, and shall have the number of votes equal to the number of shares of common stock issuable upon conversion of such holder's Series F Preferred Stock, but not in excess of the beneficial ownership limitations.

Series G Preferred Stock

As of June 30, 2017, and December 31, 2016, there were 1,000,000 and none shares of our Series G Preferred Stock issued and outstanding and convertible into 1,000,000 and none shares of our common stock, respectively.

Pursuant to a Series G Preferred Stock Certificate of Designations, on May 15, 2017, we designated 5,000,000 shares of our blank check preferred stock as Series G Preferred Stock, par value of $0.01 per share.

The shares of Series G Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the of such Series G Preferred Stock, plus all accrued and unpaid dividends, if any, on such Series G Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series G Preferred Stock is $1.75 and the initial conversion price is $1.75 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. The holder of a majority of the Series G Preferred Stock shall have the right to nominate a candidate for the Board, such right to expire on December 31, 2017.

In the event of a liquidation, dissolution or winding up of the Company, each share of Series G Preferred Stock will be entitled to a per share preferential payment equal to the par value. All shares our capital stock will be junior in rank to Series G Preferred Stock with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company, except for the Company's Series D Convertible Preferred Stock, Series E Convertible Preferred Stock and Series F Convertible Preferred Stock. The holders of Series G Preferred Stock will be entitled to receive dividends if and when declared by our Board of Directors. The Series G Preferred Stock shall participate on an "as converted" basis, with all dividends declared on our common stock. In addition, if we grant, issue or sell any rights to purchase our securities pro rata to all our record holders of our common stock, each holder will be entitled to acquire such securities applicable to the granted purchase rights as if the holder had held the number of shares of common stock acquirable upon complete conversion of all Series G Preferred Stock then held.

We are prohibited from effecting a conversion of the Series G Preferred Stock to the extent that, as a result of such conversion, the holder would beneficially own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series G Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99%. Each holder is entitled to vote on all matters submitted to stockholders of the Company, and shall have the number of votes equal to the number of shares of common stock issuable upon conversion of such holder's Series G Preferred Stock, but not in excess of the beneficial ownership limitations.

Series H Preferred Stock

As of June 30, 2017, and December 31, 2016, there were 850 and none shares of our Series H Preferred Stock issued and outstanding and convertible into 485,714 and none shares of our common stock, respectively.

Pursuant to a Series H Preferred Stock Certificate of Designations, on May 3, 2017, we designated 2,000 shares of our blank check preferred stock as Series H Preferred Stock, par value of $0.01 per share.

The shares of Series H Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series H Preferred Stock, plus the Base Amount, if any, on such Series H Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series H Preferred Stock is $1,000 and the initial conversion price is $1.75 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events.

In the event of a liquidation, dissolution or winding up of the Company, each share of Series H Preferred Stock will be entitled to a per share preferential payment equal to the Base Amount. All shares of our capital stock will be junior in rank to Series H Preferred Stock with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company other than Series A through G Preferred Stock. The holders of Series H Preferred Stock will be entitled to receive dividends if and when declared by our Board of Directors. The Series H Preferred Stock shall participate on an "as converted" basis, with all dividends declared on our common stock. In addition, if we grant, issue or sell any rights to purchase our securities pro rata to all our record holders of our common stock, each holder will be entitled to acquire such securities applicable to the granted purchase rights as if the holder had held the number of shares of common stock acquirable upon complete conversion of all Series H Preferred Stock then held.

We are prohibited from effecting a conversion of the Series H Preferred Stock to the extent that, as a result of such conversion, the holder would beneficially own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series H Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99%. Each holder is entitled to vote on all matters submitted to stockholders of the Company, and shall have the number of votes equal to the number of shares of common stock issuable upon conversion of such holder's Series H Preferred Stock, but not in excess of the beneficial ownership limitations.

Series I Preferred Stock

As of June 30, 2017, and December 31, 2016, there were 1,968,664 and none shares of our Series I convertible preferred stock (the "Series I Preferred Stock") issued and outstanding and convertible into 1,968,664 and none shares of our common stock, respectively.

Pursuant to a Series I Preferred Stock Certificate of Designations, on May 26, 2017, we designated 1,968,664 shares of our blank check preferred stock as Series I Preferred Stock, par value of $0.01 per share.

Each share of Series I Preferred Stock has a stated value of $0.01 per share. In the event of a liquidation, dissolution or winding up of the Company, each share of Series I Preferred Stock will be entitled to a per share preferential payment equal to the stated value. Each share of Series I Preferred Stock is convertible into one share of common stock. The conversion ratio is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Company is prohibited from effecting the conversion of the Series I Preferred Stock to the extent that, as a result of such conversion, the holder beneficially owns more than 4.99%, in the aggregate, of the issued and outstanding shares of the Company's Common Stock calculated immediately after giving effect to the issuance of shares of Common Stock upon the conversion of the Series I Preferred Stock (the "Beneficial Ownership Limitation"), which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99%. Each share of Series I Preferred Stock entitles the holder to vote on all matters voted on by holders of Common Stock. With respect to any such vote, each share of Series I Preferred Stock entitles the holder to cast such number of votes equal to the number of shares of Common Stock such shares of Series I Preferred Stock are convertible into at such time, but not in excess of the Beneficial Ownership Limitation.

Warrants Issued in Connection with April 2015 Private Placement

As of June 30, 2017, and December 31, 2016, there were warrants to purchase 706,262 shares at $11.10 per share and 99,099 shares at $2.00 per share; and as of December 31, 2016, there were warrants to purchase 805,361 shares of common stock at $11.10 per share that were outstanding that were remaining from our private offering in March and April 2015 (the "April 2015 Private Placement") in which we sold $8,546,348 worth of units (the "Units"), net of $668,150 in issuance costs, of which $2,500,000 of the Units consisted of Series E Preferred Stock and the balance consisted of 1,660,271 shares of common stock, together with warrants to all investors to purchase 1,055,361 shares of common stock at $11.10 per share. Each Unit was sold at a purchase price of $5.55 per Unit. OPKO Health, Inc., the lead investor in the April 2015 Private Placement, purchased $2,500,000 worth of Units consisting of all of the shares of the Series E Preferred Stock.

The warrants are exercisable upon issuance and expire October 10, 2017, and may be exercised for cash or on a cashless basis if at $11.10 per share, or for cash if at $2.00 per share. The warrant exercise price is subject to certain adjustments including stock splits, dividends and reverse-splits. The Company is prohibited from effecting the exercise of the warrants to the extent that, as a result of such exercise, the holder beneficially would own more than 4.99% in the aggregate, of the issued and outstanding shares of the Company's common stock calculated immediately after giving effect to the issuance of shares of common stock upon the exercise of the warrants. Investor rights of participation in future financings by the Company expired on April 10, 2017. The warrants are not listed on any securities exchange or other trading market.

In connection with the May 2017 Public Offering, for the investors in the April 2015 Private Placement to issue 2,900,000 shares of common stock (the "Inducement Shares"), they were required to invest at least 25% of their original investment from such private financing in the May 2017 Public Offering and still hold 100% of their common stock or Series E preferred stock from the private 2015 financing, and must also must agree to amend the terms of their outstanding warrants that had an exercise price of $11.10 per share, such that the amended warrants shall have an exercise price of $2.00 per share and no cashless exercise feature (as amended, the "Inducement Amended Warrants"). The Company further agreed with the lead investor in the May 2017 Public Offering (the "Lead Investor") in connection with the warrant issued in the April 2015 Private Placement to register for resale on a registration statement all the Inducement Shares and shares of common stock underlying the Inducement Amended Warrants.

Warrants Issued in Connection with October 2015 Public Offering

As of June 30, 2017, and December 31, 2016, there were warrants to purchase 168,919 shares of common stock that were outstanding that we issued in connection with our public offering on October 5, 2015, which consisted of 337,838 shares of common stock and warrants to purchase 168,919 shares of common stock, at an offering price of $8.14 per share. For every two shares of common stock sold, the Company issued one warrant to purchase one share of common stock. We received $2,750,000 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling approximately $586,608. The shares and warrants were separately issued and sold in equal proportions. The warrants are immediately exercisable, expire September 30, 2018, and have an exercise price of $9.77 per share. The warrants are not listed on any securities exchange or other trading market.

August 2016 Public Offering

On August 22, 2016, we closed a public offering of 1,297,038 shares of common stock and 665,281 shares of Series F preferred stock, and warrants to purchase 1,962,319 shares of common stock at $5.55 per share and warrants to purchase 1,962,319 shares of common stock at $6.29 per share, at an offering price of $4.81 per share. For every one share of common stock or Series F preferred stock sold, we issued one warrant to purchase one share of common stock at $5.55 per share and one warrant to purchase one share of common stock at $6.29 per share. We received $9,438,753 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling $871,305. The gross proceeds include the underwriter's over-allotment option, which it exercised on the closing date.

May 2017 Private Placement

On May 3, 2017, we entered into separate subscription agreements with accredited investors pursuant to which we sold an aggregate of $850,000, or 850 shares, of Series H Preferred Stock, at a stated value of $1,000 per share, before offering costs of $29,429, in the May 2017 Private Placement. The shares of Series H Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series H Preferred Stock, plus the Base Amount, if any, on such Series H Preferred Stock, as of such date of determination, divided by the conversion price. The initial conversion price is $1.75 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events.

In the event of a liquidation, dissolution or winding up of the Company, each share of Series H Preferred Stock will be entitled to a per share preferential payment equal to the Base Amount. All shares of our capital stock will be junior in rank to Series H Preferred Stock with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company other than Series A through G Preferred Stock. The holders of Series H Preferred Stock will be entitled to receive dividends if and when declared by our Board of Directors. The Series H Preferred Stock shall participate on an "as converted" basis, with all dividends declared on our common stock. In addition, if we grant, issue or sell any rights to purchase our securities pro rata to all our record holders of our common stock, each holder will be entitled to acquire such securities applicable to the granted purchase rights as if the holder had held the number of shares of common stock acquirable upon complete conversion of all Series H Preferred Stock then held.

We are prohibited from effecting a conversion of the Series H Preferred Stock to the extent that, as a result of such conversion, the holder would beneficially own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of shares of common stock upon conversion of the Series H Preferred Stock, which beneficial ownership limitation may be increased by the holder up to, but not exceeding, 9.99%. Each holder is entitled to vote on all matters submitted to stockholders of the Company, and shall have the number of votes equal to the number of shares of common stock issuable upon conversion of such holder's Series H Preferred Stock, but not in excess of the beneficial ownership limitations.

The shares were offered and sold solely to "accredited investors" in reliance on the exemption from registration afforded by Rule 506 of Regulation D and Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"). On the closing date, we entered into registration rights agreements with each of the investors, pursuant to which we agreed to undertake to file a registration statement to register the resale of the shares within thirty (30) days following the closing date, to cause such registration statement to be declared effective by the Securities and Exchange Commission within sixty (60) days of the closing date and to maintain the effectiveness of the registration statement until all of such shares have been sold or are otherwise able to be sold pursuant to Rule 144 under the Securities Act, without any restrictions.

On May 10, 2017, we entered into exchange agreements (the "Exchange Agreements") with each of the holders of our Series H Preferred Stock representing an aggregate of $850,000 of our Series H Preferred Stock (the "Exchange Securities") with such exchange to be effective on the closing of our May 2017 Public Offering. Prior to the closing of the May 2017 Public Offering, we and the holders rescinded and cancelled the Exchange Agreements and they have no force and effect and no transaction contemplated by the Exchange Agreements was consummated.

May 2017 Public Offering

On May 19, 2017, we closed a public offering of 1,342,858 shares of common stock and 1,000,000 shares of newly designated 0% Series G Convertible Preferred Stock, or Series G Preferred Stock, at $1.75 per share of common stock and Series G Preferred Stock, or the May 2017 Public Offering. The Series G Preferred Stock is initially convertible into 1,000,000 shares of common stock, subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events and was purchased by certain existing investors of the Company who, as a result of their purchases of common stock, would hold in excess of 4.99% of our issued and outstanding common stock. We received $4,100,000 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling $397,743.

The May 2017 Public Offering was consummated pursuant to an underwriting agreement that we signed on May 15, 2017, with Laidlaw & Company (UK) Ltd. ("Laidlaw"), as underwriter (the "Underwriter") pursuant to which, among other things, we agreed to issue and sell to the Underwriter, and the Underwriter agreed to purchase from us, in an underwritten public offering, an aggregate of 1,342,858 shares of common stock and 1,000,000 shares of Series G Preferred Stock. We granted the Underwriters an option for a period of up to 45 days from the date of our prospectus to purchase up to an aggregate of 201,428 additional shares of our common stock at the public offering price of $1.75 per share, less the underwriting discount, solely to cover overallotments, which was not exercised.

In connection with the May 2017 Public Offering, we agreed with the lead investor of the August 2016 Public Offering (the "August Lead Investor") pursuant to a Letter Agreement, dated May 18, 2017, to issue the Inducement Shares to the investors in the August 2016 Public Offering (the "August 2016 Investors"), as incentive shares to those investors to make a minimum required investment in this public offering of at least 50% of their investment in the $9.4 million August 2016 Public Offering, or the Minimum Required Investment, and who still hold 100% of the shares of common stock previously acquired. Such August 2016 Investors shall be entitled to receive their pro rata share of 2,900,000 shares, after the Lead Investor in this offering receives the first 10%. For the August 2016 Investors who purchased Series F Preferred Stock and made the Minimum Required Investment and who still held 100% of the shares of Series F Preferred Stock at the closing of the May 2017 Public Offering, they may, instead of receiving a pro rata share of the 2,610,000 shares remaining after the August Lead Investor receives the first 290,000 shares, elect to receive their Inducement Shares in the form of a new Series I Preferred Stock to be created with similar rights as currently exist in the Series G Preferred Stock. The stated value of each share of Series I Preferred Stock will be $0.01 and the conversion rate shall be one (1) share of common stock for one (1) share of Series I Preferred Stock, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. In the event of a liquidation, dissolution or winding up of the Company, each share of Series I Preferred Stock will be entitled to a per share preferential payment equal to the par value, or $0.01 per share. All shares of the Company's capital stock will be junior in rank to the Series I Preferred Stock at the time of creation, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company, except for the Company's Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock, Series G Preferred Stock, and Series H Preferred Stock.

Also in connection with the May 2017 Public Offering, for these August 2016 Investors to receive the Inducement Shares, each of them must also agree to the cancellation of the warrants issued to them in the August 2016 Public Offering. Investors in the Company's 2015 private offering that invest at least 25% of their original investment from such private financing in the May 2017 Public Offering and still hold 100% of their common stock or Series E preferred stock from the private 2015 financing also must agree to amend the terms of their outstanding warrants that currently have an exercise price of $11.10 per share, such that the amended warrants shall have an exercise price of $2.00 per share and no cashless exercise feature (as amended, the "Inducement Amended Warrants"). The Company agreed with the Lead Investor to register for resale on a registration statement all the Inducement Shares and shares of common stock underlying the Inducement Amended Warrants, and to issue the Inducement Shares to each investor meeting the investment and ownership terms described above.

Based on the closing of the Offering, and election of certain prior investors who made the Minimum Required Investment and elected to take Series I Preferred Stock upon its creation, 931,336 Inducement Shares of common stock were issued and 1,968,664 Inducement Shares were issued in the form of Series I Preferred Stock that was created following the closing of the May 2017 Public Offering and issued following verification with each investors that the terms of the Inducement Shares have been met. The Company recorded a deemed dividend of $5,220,000 for the three and six months ended June 30, 2017 in connection with issuing the Inducement Shares.

Additionally, in connection with participation by the April 2015 investors in the May 2017 Public Offering, the Company revised the exercise price for 90,099 warrants from $11.10 to $2.00 per warrant share and recorded a deemed dividend of $19,413 for the three and six months ended June 30, 2017.

May 2017 Letter Agreement

As a condition to the Lead Investor leading an investment in the May 2017 Public Offering, including the requirement that we offer incentive shares to August 2016 Investors who participate in making the Minimum Required Investment in the May 2017 Public Offering, we agreed to the following:

Board Nomination	The Company shall nominate one candidate to the Board of Directors of the Company acceptable to the holder of a majority of the Series G Preferred Stock by December 31, 2017, and two current Board members will resign.
Executive Hire	The Company shall hire a new C-level executive in a leadership role by July 15, 2017.
Board Compensation	The Company is obligated to issue an aggregate of 1,050,000 options to certain employees and members of the Board, at a price not less than $2.00 per share, and 50,000 options to each other Board member at the current market price in connection with this offering. The options shall be issued pursuant to the Company's option plan and are subject to the requisite approvals and subject to availability under the plan. To the extent we need to increase the number of shares available under such plan, we will need the approval of our Board and Stockholders. All Board fees will be waived for 2017.
Funds Held in Escrow	$500,000 of the funds from this offering will be held in escrow and released to one or more investor relations services acceptable to the Company following the closing of this offering.

Additionally we granted the Lead Investor in the May 2017 Public Offering certain rights to approve future (i) issuances of our securities, (ii) equity or debt financings and (iii) sales of any development product assets currently held by us, subject to certain exceptions, if such securities are sold at price below $2.50 per share and for as long as the Lead Investor in the offering holds 50% or more of the shares of Series G Preferred Stock purchased by the Lead Investor in this offering (the "May 2017 Consent Right"). All other prior consent rights of the Lead Investor have been superseded by the May 2017 Consent Right.

For the period from the May 2017 Public Offering to June 30, 2017, the Company incurred approximately $177,000 in expenses related to outside investor relations services. Further, two Board members have resigned, which achieves one of the conditions of the Lead Investor.

Consultant Grants

On January 13, 2016, the Board of Directors approved the issuance of 13,514 shares of restricted stock with immediate vesting valued at $64,000 to a consultant for advisory services to the Company.

On February 10, 2017, the Company entered into a consulting agreement with MDM Worldwide, pursuant to which MDM Worldwide shall provide investor relations services to the Company in consideration for an immediate grant of 20,000 shares of the Company's common stock and a monthly cash retainer of $10,000 a month for ongoing services for a period of one year. As the shares granted were fully vested upon grant and the Company has no legal recourse to recover the shares in the event of nonperformance, the Company recognized the grant date fair value of the 20,000 shares or $56,600, as investor relations expense upon grant during the first quarter of 2017.

On March 7, 2017, the Company entered into a consulting agreement with Jenene Thomas Communications, pursuant to which Jenene Thomas Communications shall provide investor relations services to the Company. In consideration for the services, which begin on April 1, 2017, we will pay a monthly cash retainer of $12,500. Additionally, we issued 20,000 restricted shares of common stock on April 1, 2017, to be vested at 5,000 per quarter over the four quarters of services under the agreement beginning April 1, 2017. The shares granted vest over a one-year period over which the services are performed and, as such, will be amortized over the same period beginning in April 1, 2017. During the three and six months ended June 30, 2017, we have recognized $6,950 in general and administrative expenses related to this arrangement in common stock for services.

6. Notes Payable

On January 15, 2016, we entered into a loan and security agreement with Oxford Finance, LLC pursuant to which we had the option to borrow $10,000,000 in two equal tranches of $5,000,000 each (the "Loan Agreement"). The first tranche of $5,000,000 was funded at close on January 15, 2016 (the "Term A Loan"). The option to fund the second tranche of $5,000,000 (the "Term B Loan") was upon the Company achieving positive interim data on the Phase 1 HuMab-5B1 antibody trial in pancreatic cancer and successfully uplisting to either the NASDAQ Stock Market or NYSE MKT on or before September 30, 2016. The option for the Term B Loan expired on September 30, 2016. The Company is not pursuing completion of any additional debt financing with Oxford Finance, LLC at the present time. The interest rate for the Term A Loan is set on a monthly basis at the index rate plus 11.29%, where the index rate is the greater of the 30-day LIBOR rate or 0.21%. Interest is due on the first day of each month, in arrears, calculated based on a 360-day year. The loan is interest only for first year after funding, and the principal amount of the loan is amortized in equal principal payments, plus period interest, over the next 36 months. A facility fee of 1.0% or $100,000 was due at closing of the transaction, and was earned and paid by the Company on January 15, 2016. The Company is obligated to pay a $150,000 final payment upon completion of the term of the loan, and this amount is being accreted using the effective interest rate method over the term of the loan. Each of the term loans can be prepaid subject to a graduated prepayment fee, depending on the timing of the prepayment.

Concurrent with the closing of the transaction, the Company issued 225,226 common stock purchase warrants to Oxford Finance, LLC with an exercise price of $5.55 per share. The warrants are exercisable for five years and may be exercised on a cashless basis, and expire on January 15, 2021. The Company recorded $607,338 for the fair value of the warrants as a debt discount within notes payable and an increase to additional paid-in capital on the Company's balance sheet. We used the Black-Scholes-Merton valuation method to calculate the value of the warrants. The debt discount is being amortized as interest expense over the term of the loan using the effective interest method.

We granted Oxford Finance, LLC a perfected first priority lien on all of the Company's assets with a negative pledge on intellectual property. The Company paid Oxford Finance, LLC a good faith deposit of $50,000, which was applied towards the facility fee at closing. The Company agreed to pay all costs, fees and expenses incurred by Oxford Finance, LLC in the initiation and administration of the facilities including the cost of loan documentation.

At the initial funding, the Company received net proceeds of approximately $4,610,000 after fees and expenses. These fees and expenses are being accounted for as a debt discount and classified within notes payable on the Company's condensed consolidated balance sheet. The Company's transaction costs of approximately $390,000 are presented in the condensed consolidated balance sheet as a direct deduction from the carrying amount of the notes payable, consistent with debt discounts. Debt discounts, issuance costs and the final payment are being amortized or accreted as interest expense over the term of the loan using the effective interest method.

The Loan Agreement also contains customary indemnification obligations and customary events of default, including, among other things, our failure to fulfill certain of the Company's obligations under the Loan Agreement, the occurrence of a material adverse change, which is defined as a material adverse change in the Company's business, operations, or condition (financial or otherwise), a material impairment of the prospect of repayment of any portion of the loan, or a material impairment in the perfection or priority of the Lenders' lien in the collateral or in the value of such collateral. In the event of default by the Company under the Loan Agreement, the Lenders would be entitled to exercise their remedies thereunder, including the right to accelerate payment of the debt, upon which we may be required to repay all amounts then outstanding under the Loan Agreement, which could harm the Company's financial condition.

On March 31, 2017, we and Oxford Finance, LLC signed a First Amendment to Loan and Security Agreement ("Amendment"), providing that the payment of principal on the January 2016 Term Loan that otherwise would have been due on the Amortization Date will be due and payable on May 1, 2017 along with any other payment of principal due on May 1, 2017. We were obligated to pay a fully earned and non-refundable amendment fee of $15,000 to the Collateral Agent. On May 1, 2017, we paid the principal due on May 1, 2017, along with the $15,000 amendment fee.

The Company was in compliance with all applicable covenants set forth in the Loan Agreement as of June 30, 2017.

For the three and six months ended June 30, 2017, the Company recorded interest expense related to the term loan of $150,634 and $307,292, respectively. For the three and six months ended June 30, 2016, the Company recorded $155,512 and $284,441 in interest expense related to the term loan, respectively. The annual effective interest rate on the note payable, including the amortization of the debt discounts and accretion of the final payment, but excluding the warrant amortization, was approximately 13.17% and 11.72% as of June 30, 2017 and 2016, respectively.

Future principal payments under the Loan Agreement as of June 30, 2017, are as follows:

Years ending December 31:	
2017 (remaining)	$ 972,221
2018	1,666,667
2019	1,666,667
2020	138,889
Notes payable, balance as of June 30, 2017	4,444,444
Unamortized discount on notes payable	(492,888)
Notes payable, balance as of June 30, 2017	3,951,556
Current portion of notes payable	(1,666,667)
Non-current portion of notes payable	$ 2,284,889

7. Related Party Transactions

On April 1, 2016, the Company entered into a two-year consulting agreement with Jeffrey Ravetch, M.D., Ph.D., a Board member until August 3, 2017, for work beginning January 1, 2016 through December 31, 2017, at a rate of $100,000 a year, in support of scientific and technical advice on the discovery and development of technology and products for the Company primarily related to monoclonal antibodies, corporate development, and corporate partnering efforts. In April 2016, the Company paid Dr. Ravetch $100,000 for services to be performed in 2016, and will pay quarterly thereafter beginning January 1, 2017. During the three and six months ended June 30, 2017, the Company recorded $25,000 and $50,000, respectively, in consulting expenses, as part of general and administration expenses, related to this agreement.

On November 3, 2016, the Company granted 17,500 stock options to Jeffrey Ravetch, M.D., Ph.D., for his ongoing consulting services to the Company. The option award vests over a three-year period. During the three and six months ended June 30, 2017, the Company recognized $3,826 and $7,652 of stock-based compensation expense, respectively, as part of general and administration expenses, related to this option grant.

On May 19, 2017, the Company granted each director, other than J. David Hansen, Jeffrey Ravetch, a Board member at the time, and Philip Livingston, 50,000 options at market price, $1.80 on May 19, 2017, with immediate vesting for their continuing service to the Company, in exchange for giving up their Board fees for the remainder of the year. J. David Hansen and Jeffrey Ravetch were each granted 500,000 options and Philip Livingston was granted 50,000 options each at $2.00 exercise price per share with immediate vesting and no performance obligations. Options granted to J. David Hansen, CEO and Philip Livingston were granted as a condition of the May 2017 financing transaction. The 450,000 options granted to Dr. Ravetch in addition to the 50,000 options granted to other non-employee members of the Company's Board of Directors were in recognition of the additional value provided by Dr. Ravetch as a scientific expert. During the three months ended June 30, 2017, the Company recorded $1,480,089 in stock-based compensation expenses in general and administration expenses, related to these grants.

8. Stock-based Activity

Amendment of Equity Incentive Plan

On March 31, 2015, the Company approved a Second Amended and Restated 2014 Employee, Director and Consultant Equity Incentive Plan (the "Plan") to increase the number of shares reserved for issuance under the Plan from 21,362 to 1,129,837 shares of common stock. Additional changes to the Plan include:

- An "evergreen" provision to reserve additional shares for issuance under the Plan on an annual basis commencing on the first day of fiscal 2016 and ending on the second day of fiscal 2024, such that the number of shares that may be issued under the Plan shall be increased by an amount equal to the lesser of: (i) 1,081,081 or the equivalent of such number of shares after the administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with the Plan; (ii) the number of shares necessary such that the total shares reserved under the Plan equals (x) 15% of the number of outstanding shares of common stock on such date (assuming the conversion of all outstanding shares of Preferred Stock (as defined in the Plan) and other outstanding convertible securities and exercise of all outstanding warrants to purchase common stock) plus (y) 30,946; and (iii) an amount determined by the Board.

- Provisions that no more than 405,406 shares may be granted to any participant in any fiscal year.

- Provisions to allow for performance based equity awards to be issued by the Company in accordance with Section 162(m) of the Internal Revenue Code.

- On September 22, 2016, the Board of Directors ratified an automatic increase in the number of shares reserved for issuance under the Plan, increasing the total shares reserved from 1,129,837 to 1,208,307 shares of common stock, under the annual evergreen provision for the Plan, plus a fixed amount of 30,946.

- On January 1, 2017, the Board of Directors ratified an automatic increase in the number of shares reserved for issuance under the Plan, effective January 1, 2017, increasing the total shares reserved from 1,208,307 to 2,159,352 shares of common stock, under the annual evergreen provision for the Plan , plus a fixed amount of 30,946.

- On June 12, 2017, at the Company's stockholders at its annual meeting approved a proposal to increase in the number of shares reserved for issuance under the Plan, increasing the total shares reserved under the Plan from 2,128,406 (including the fixed amount of 30,946) to 4,128,406, and increasing the number of shares that may be granted to any participant in any fiscal year to 900,000, from 405,406.

Stock-based Compensation

We measure stock-based compensation expense for equity-classified awards, principally related to stock options and restricted stock units, or RSUs, based on the estimated fair value of the award on the date of grant. We recognize the value of the portion of the award that we ultimately expect to vest as stock-based compensation expense over the requisite service period in our condensed consolidated statements of operations. Due to limited activity in 2017, 2016 and 2015, we assumed a forfeiture rate of zero.

We use the Black-Scholes model to estimate the fair value of stock options granted. The expected term of stock options granted represents the period of time that we expect them to be outstanding. For the three and six months ended June 30, 2017 and 2016, the following valuation assumptions were used:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Risk-free interest rate	1.8%	1.2 to 1.4%	1.5 to 2.0%	1.2 to 1.4%
Dividend yield	0%	0%	0%	0%
Expected volatility	80%	82 to 84%	73 to 85%	82 to 84%
Expected life of options, in years	5 yrs.	6 yrs.	1.4 to 6.0 yrs.	6 yrs.
Weighted-average grant date fair value	$1.14	$2.76	$1.53	$2.93

Total estimated stock-based compensation expense, related to all of the Company's stock-based payment awards recognized under ASC 718, *"Compensation—Stock Compensation"* and ASC 505, "Equity" was comprised of the following:

	Three Months Ended June 30, 2017	Three Months Ended June 30, 2016	Six Months Ended June 30, 2017	Six Months Ended June 30, 2016
Research and development	$ 376,684	$ 284,057	$ 697,359	$ 587,681
General and administrative	2,093,140	673,506	2,805,277	1,903,770
Total stock-based compensation expense	$ 2,469,824	$ 957,563	$ 3,502,636	$ 2,491,451

Stock-based Award Activity

The following table summarizes the Company's stock option activity during the six months ended June 30, 2017:

	Options Outstanding	Weighted-Average Exercise Price
Outstanding at December 31, 2016	851,375	$ 10.94
Granted	2,046,690	2.37
Exercised	—	—
Forfeited/cancelled/expired	(1,081)	4.19
Outstanding and expected to vest at June 30, 2017	2,896,984	$ 4.89
Vested and exercisable at June 30, 2017	1,672,364	$ 4.73

The total unrecognized compensation cost related to unvested stock option grants as of June 30, 2017, was $3,385,133 and the weighted average period over which these grants are expected to vest is 2.23 years. The weighted average remaining contractual life of stock options outstanding at June 30, 2017 and 2016 is 9.35 and 9.0 years, respectively.

During the first six months of 2017, the Company granted 2,046,690 options to officers and employees with a weighted average exercise price of $2.37 which consisted of 1,300,000 shares vesting immediately at grant and remainder vesting over a three-year period starting at the one-year anniversary of the grant date. During the first six months of 2016, the Company granted 223,716 options to officers and employees with a weighted average exercise price of $5.40.

Stock options granted to employees generally vest over a three-year period with one third of the grants vesting at each one-year anniversary of the grant date.

Because the Company had a net operating loss carryforward as of June 30, 2017, no tax benefits for the tax deductions related to stock-based compensation expense were recognized in the Company's condensed consolidated statements of operations. Additionally, no stock options were exercised in the three and six months ended June 30, 2017 and 2016.

A summary of activity related to restricted stock grants under the Plan for the six months ended June 30, 2017 is presented below:

	Shares	Weighted Average Grant-Date Fair Value
Non-vested at December 31, 2016	205,478	$ 16.84
Granted	—	—
Vested	(98,238)	17.02
Forfeited	—	—
Non-vested at June 30, 2017	107,240	$ 16.84

As of June 30, 2017, there were 107,240 nonvested restricted stock units remaining outstanding.

As of June 30, 2017, and 2016, unamortized compensation expense related to restricted stock grants amounted to $1,271,294 and $2,975,469, respectively, which is expected to be recognized over a weighted average period of 0.79 and 1.8 years, respectively.

Management Bonus Plan and Compensation for Non-Employee Directors

On February 16, 2016, our Compensation Committee approved a 2016 Management Bonus Plan (the "2016 Management Plan") outlining maximum target bonuses of the base salaries of certain of our executive officers. Under the terms of the 2016 Management Plan, the Company's Chief Executive Officer shall receive a maximum target bonus of up to 50% of his annual base salary, and the Chief Financial Officer and each of the Company's Vice Presidents shall receive a maximum target bonus of up to 30% of their annual base salary.

On February 16, 2016, the Compensation Committee of the Board of Directors of the Company approved the following amendments to Company's policy for compensating non-employee members of the Board:

- The initial equity grant upon first appointment (or election) of future non-employee directors to the Board shall be a 10-year option to purchase 6,757 shares of the Company's common stock, under the Company's Second Amended and Restated 2014 Equity Incentive Plan with 3-year annual vesting and a strike price equal the closing price of the Company's common stock on the effective date of the appointment (or election);

- The annual cash retainer for each non-employee director, paid quarterly, is increased by $1,000 per calendar quarter to a total of $7,000 per quarter, effective April 1, 2016; and

- The additional annual cash retainer for the chairperson of each of the Audit, Compensation, and Nominating and Governance Committees, paid quarterly, is increased by $1,000 per calendar year, such that each chairperson retainer shall be as follows, effective April 1, 2016: Audit Committee: $13,000; Compensation Committee: $9,000; Nominating and Governance Committee: $6,000.

On August 25, 2016, the Compensation Committee of the Board of Directors of the Company approved the following amendments to Company's policy for compensating non-employee members of the Board:

- The initial equity grant upon first appointment (or election) of future non-employee directors to the Board shall be a 10-year option to purchase 25,000 shares of the Company's common stock, under the Company's Second Amended and Restated 2014 Equity Incentive Plan with 3-year annual vesting and a strike price equal to the closing price of the Company's common stock on the effective date of the appointment (or election); and

- The additional automatic annual option grant to each non-employee director on the date of the Company's annual meeting shall be a 10-year option to purchase 17,500 shares of the Company's common stock, under the Company's Second Amended and Restated 2014 Equity Incentive Plan with 1-year vesting and a strike price equal to the closing price of the Company's common stock on the date of the annual meeting.

On February 6, 2017, the Compensation Committee of the Board of Directors of the Company approved the following amendments to Company's policy for compensating non-employee members of the Board:

- The initial equity grant upon first appointment (or election) of future non-employee directors to the Board shall be a 10-year option to purchase 30,000 shares of the Company's Common Stock, under the Company's Second Amended and Restated 2014 Equity Incentive Plan with 3-year annual vesting and a strike price equal to the closing price of the Company's common stock on the effective date of the appointment (or election);

- The additional automatic annual option grant to each non-employee director on the date of the Company's annual meeting shall be a 10-year option to purchase 20,000 shares of the Company's Common Stock, under the Company's Second Amended and Restated 2014 Equity Incentive Plan with 1-year vesting and a strike price equal the closing price of the Company's common stock on the date of the annual meeting.

Common stock reserved for future issuance

Common stock reserved for future issuance consists of the following at June 30, 2017:

Common stock reserved for conversion of preferred stock and warrants	8,038,563
Common stock options outstanding	2,896,984
Authorized for future grant or issuance under the Stock Plan	972,129
Unvested restricted stock	107,240
Total	12,014,916

9. Net Loss per Share

The Company calculates basic and diluted net loss per share using the weighted-average number of shares of common stock outstanding during the period.

When the Company is in a net loss position, it excludes from the calculation of diluted net loss per share all potentially dilutive stock options, preferred stock and warrants, and the diluted net loss per share is the same as the basic net loss per share for such periods. If the Company was to be in a net income position, the weighted average number of shares used to calculate the diluted net income per share would include the potential dilutive effect of in-the-money securities, as determined using the treasury stock method.

The table below presents, the potentially dilutive securities that would have been included in the calculation of diluted net loss per share if they were not antidilutive for the periods presented.

	As of June 30,	
	2017	**2016**
Stock options	2,896,984	632,310
Restricted stock awards	107,240	212,689
Preferred stock	5,965,148	2,792,190
Common stock warrants	2,073,415	1,199,505
Total	11,042,787	4,836,694

10. Contracts and Agreements

Memorial Sloan Kettering Cancer Center, or MSK

Since 2008 the Company has engaged in various research agreements and collaborations with MSK including licensed rights to cancer vaccines and the blood samples from patients who have been vaccinated with MSK's cancer vaccines. Total sponsored research contracts outstanding in 2016 amounting to approximately $800,000 in 2016 were 100% complete as of the year ended December 31, 2016. Such sponsored research agreements provide support for preclinical work on the Company's product development programs. The work includes preparing radioimmunoconjugates of the Company's antibodies and performing *in vitro* and *in vivo* pharmacology studies for our therapeutic antibody product, imaging agent product and radioimmunotherapy product programs. For the three and six months ended June 30, 2017 the Company incurred $0 and $184,000 expenses related to these contracts, respectively, and for the three and six months ended June 30, 2016, the Company incurred $0 and $212,574, respectively.

Life Technologies Licensing Agreement

On September 24, 2015, the Company entered into a licensing agreement with Life Technologies Corporation, a subsidiary of ThermoFisher Scientific. Under the agreement MabVax agreed to license certain cell lines from Life Technologies Corporation to be used in the production of recombinant proteins for the Company's clinical trials. The amount of the contract is for $450,000 and was fully expensed during 2015. This agreement was fully paid as of December 31, 2016. For the three and six months ended June 30, 2017, and 2016, the Company recorded no expenses associated with the agreement.

Rockefeller University Collaboration

In July 2015, the Company entered into a research collaboration agreement with Rockefeller University's Laboratory of Molecular Genetics and Immunology. The Company provided antibody material to Rockefeller University, which is exploring the mechanism of action of constant region (Fc) variants of the HuMab 5B1 in the role of tumor clearance. The Company may supply additional research materials if requested by the Rockefeller University, which is evaluating ways to optimize the function. For the three and six months ended June 30, 2017, and 2016, the Company recorded no expenses associated with the agreement.

Patheon Biologics LLC Agreement

On April 14, 2014, the Company entered into a development and manufacturing services agreement with Patheon (f.k.a. Gallus Biopharmaceuticals) to provide a full range of manufacturing and bioprocessing services, including cell line development, process development, protein production, cell culture, protein purification, bio-analytical chemistry and QC testing. Total amount of the contract is estimated at approximately $3.0 million. For the three and six months ended June 30, 2017 and 2016, the Company recorded no expenses associated with the agreement.

NCI PET Imaging Agent Grant

In September 2013, the NCI awarded the Company a SBIR Program Contract to support the Company's program to develop a Positron Emission Tomography ("PET") imaging agent for pancreatic cancer using a fragment of the Company's 5B1 antibody (the "NCI PET Imaging Agent Grant"). The project period for Phase I of the grant award of approximately $250,000 covered a nine-month period, which commenced in September 2013 and ended in June 2014.

On August 25, 2014, the Company was awarded a $1.5 million contract for the Phase II portion of the NCI PET Imaging Agent Grant. The contract is intended to support a major portion of the preclinical work being conducted by the Company, together with its collaboration partner, MSK, to develop a novel PET imaging agent for detection and assessment of pancreatic cancer. The total contract amount for Phase I and Phase II was approximately $1,749,000. The Company recorded revenue associated with the NCI PET Imaging Agent Grant as the related costs and expenses were incurred. For the three and six month periods ended June 30, 2017 the Company recorded no revenues associated with the NCI PET Imaging Agent Grant, and during the same periods in 2016, the Company recorded $0 and $148,054 of revenue associated with the NCI PET Imaging Agent Grant, respectively.

11. Commitments and contingencies

Capital Leases

On March 21, 2016, the Company entered into a lease agreement with ThermoFisher Scientific ("Lessor"). Under the terms of the agreement, the Company agreed to lease two pieces of equipment from the Lessor, a liquid chromatography system and an incubator, totaling in cost of $95,656. The term of the lease is five years (60 months), and the monthly lease payment is $1,942. In addition, there is a $1.00 buyout option at the end of the lease term.

Minimum future annual capital lease obligations are as follows as of June 30, 2017:

2017 (remaining)	$ 11,652
2018	23,306
2019	23,306
2020	23,306
2021	7,769
Less interest	(12,548)
Principal	76,791
Less current portion	(17,726)
Noncurrent portion	$ 59,065

Operating Leases

In connection with the Merger, the Company recorded a $590,504 contingent lease termination fee, in connection with the termination by MabVax (f.k.a. Telik, Inc.) of the master lease and sublease of 3165 Porter Drive in Palo Alto, California, which is payable to ARE-San Francisco No. 24, if the Company receives $15 million or more in additional financing in the aggregate. The additional financing was achieved in 2015 and the termination fee is reflected on the condensed consolidated balance sheet as an accrued lease contingency fee.

On September 2, 2015, the Company entered into a lease (the "Lease") with AGP Sorrento Business Complex, L.P., for certain premises of office and laboratory space in buildings located at 11535 Sorrento Valley Rd., San Diego, California, to serve as the Company's corporate offices and laboratories (the "New Premises"). Because certain tenant improvements needed to be made to the New Premises before the Company could take occupancy, the term of the Lease did not commence until the New Premises were ready for occupancy, which was on February 4, 2016. The Lease terminates six years after such term commencement date, unless earlier terminated in accordance with the Lease. Pursuant to the terms of the Lease, the monthly base rent is $35,631, subject to annual increases as set forth in the Lease.

The Company has an option to extend the Lease term for a single, five-year period. If the Lease term is extended for the optional five-year period, the monthly base rent will be adjusted based on fair market rental value. In addition to rent, the Company agreed to pay a portion of the taxes and utility, maintenance and other operating costs paid or accrued in connection with the ownership and operation of the property.

During the three and six months ended June 30, 2017, the Company recorded rent expense of $115,238 and $230,472, respectively, and the three and six months ended June 30, 2016 the Company recorded rent expense of $115,238 and $202,921, respectively.

Minimum future annual operating lease obligations are as follows as of June 30, 2017:

2017 (remaining)	$ 220,199
2018	451,409
2019	464,951
2020	478,900
2021	493,267
Thereafter	82,612
Total	$ 2,191,338

12. Subsequent Events

Voluntary Deferrals of Management Salaries

Effective with the Company's pay period ending August 10, 2017, and without changing their employment agreements dated July 1, 2017, five members of management volunteered to defer receiving portions of their salaries that in the aggregate represent a deferral of cash payments by the Company of approximately $236,000 for the remainder of 2017. The voluntary deferral of cash payments is intended to help with the Company's cash flow for the remainder of the year, with voluntary reductions by the management team committed to remain in effect until we complete a successful financing of at least $8.0 million, or a business transaction that represents, or business transactions in the aggregate that represent, an amount of $10.0 million or greater, whichever occurs first. The employment agreements with the Company remain unchanged, except that the executives have volunteered to reduce the terms of their employment agreements to two years from three in connection with the August 11, 2017 registered direct offering and Letter Agreement with the Lead Investor discussed later in this Note 12, Subsequent Events.

Series D Conversions

Between July 1, 2017, and August 14, 2017, holders of Series D Preferred Stock converted 44,001 shares of Series D Preferred Stock into 594,603 shares of common stock.

Series I Conversions

Between July 1, 2017, and August 14, 2017, holders of Series I Preferred Stock converted 597,384 shares of Series I Preferred Stock into 597,384 shares of common stock.

July 2017 Private Placement

On July 27, 2017, we entered into a subscription agreement with an accredited investor pursuant to which we agreed to sell an aggregate of $125,000 in common stock under terms similar to the May 2017 Public Offering, in which investors purchased common stock at $1.75 per share. According to the subscription agreement, investors, if meeting the Minimum Required Investment of 25% of their original investment in a private placement in April 2015, and still hold their shares of common stock or Series E Preferred Stock purchased in April 2015, would be entitled to receive Inducement Shares of common stock, or Series I Preferred Stock, at the election of the investor who would hold in excess of 4.99% of the outstanding shares of common stock, at the rate of 1.13 shares of common stock or Series I Preferred Stock for every share of common stock or Series G Preferred Stock purchased in the May 2017 Public Offering, as well as agree to amend the terms of their outstanding warrants that currently have an exercise price of $11.10 per share, such that the amended warrants shall have an exercise price of $2.00 per share and no cashless exercise feature. The transaction closed on August 2, 2017. As a result of the investor meeting the Minimum Required Investment, the investor received an aggregate of 152,143 shares of common stock for its investment, including 80,714 Inducement Shares, and had warrants to purchase 225,225 shares of common stock repriced from $11.10 to $2.00 per warrant share.

The securities referenced above were issued in reliance on the exemption from registration afford by Rule 506 of Regulation D and/or Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving a public offering.

August 2017 Registered Direct Offering

On August 11, 2017, we entered into securities purchase agreements to sell 2,386.36 shares of a new 0% Series J Convertible Preferred Stock, or Series J Preferred Stock, to be created with a stated value of $550 per share (the "August 2017 Offering"). The Series J Preferred Stock is initially convertible into approximately 3,400,000 shares of common stock at $0.55 per share, subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events and was purchased by certain existing investors of the Company (the "Prior Investors"). The total amount of the securities purchase agreements amounted to approximately $1,312,500, before estimated expenses of $130,000. The Certificate of Designation for the Series J Preferred Stock shall include a 4.9% beneficial ownership conversion blocker, a 19.99% blocker provision to comply with Nasdaq Rules (the "19.99% Conversion Blocker") until stockholders have approved any or all shares of common stock issuable upon conversion of the Series J Preferred Stock, and a 125% liquidation preference. All shares of the Company's capital stock will be junior in rank to the Series J Preferred Stock at the time of creation, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company, except for the Company's Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock, Series G Preferred Stock, Series H Preferred Stock, and Series I Preferred Stock.

In connection with the August 2017 Offering, we agreed with the Lead Investor pursuant to a Letter Agreement, dated August 9, 2017, to issue incentive shares (the "Incentive Shares") to Prior Investors as an incentive to invest in the August 2017 Offering. Such Prior Investors shall be entitled to receive their pro rata share of 65,000 shares in the form of a new Series K Preferred Stock, to be created that is substantially similar to common stock. and convertible into 6,500,000 shares of common stock, subject to stockholder approval. The stated value of each share of Series K Preferred Stock will be $0.01 and the conversion rate shall be the stated value of $0.01 divided by .0001, or one hundred (100) shares of common stock upon conversion of one (1) share of Series K Preferred Stock, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar event, and have a 4.9% beneficial ownership conversion blocker. In the event of a liquidation, dissolution or winding up of the Company, each share of Series K Preferred Stock will be entitled to a per share preferential payment equal to the par value, or $0.01 per share. All shares of the Company's capital stock will be junior in rank to the Series K Preferred Stock at the time of creation, with respect to the preferences as to dividends, distributions and payments upon the liquidation, dissolution and winding-up of the Company, except for the Company's Series D Preferred Stock, Series E Preferred Stock, Series F Preferred Stock, Series G Preferred Stock, Series H Preferred Stock, Series I Preferred Stock and Series J Preferred Stock.

In order to meet Nasdaq Capital Market rules in the August 2017 Offering, we are not obligated to issue any shares of common stock upon conversion of the Series J Preferred Stock which would cause the Company to breach our obligations under the rules and regulations of the Nasdaq Capital Market, which limit the aggregate number of shares issued at a discount to market at 19.99% of the number of shares outstanding on the closing date of the August 2017 Offering, except that such limitation shall not apply in the event that we obtain the approval of our stockholders as required by the applicable rules of the Nasdaq Capital Market for issuances of common stock in excess of such amount. Similarly, none of the Series K Preferred Stock may be converted into common stock until we obtain the approval of our stockholders.

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

FORWARD LOOKING STATEMENTS

The following discussion should be read in conjunction with our condensed consolidated financial statements and other financial information appearing elsewhere in this quarterly report. In addition to historical information, the following discussion and other parts of this quarterly report contain forward-looking statements. You can identify these statements by forward-looking words such as "plan," "may," "will," "expect," "intend," "anticipate," believe," "estimate" and "continue" or similar words. Forward-looking statements include information concerning possible or assumed future business success or financial results. You should read statements that contain these words carefully because they discuss future expectations and plans, which contain projections of future results of operations or financial condition or state other forward-looking information. We believe that it is important to communicate future expectations to investors. However, there may be events in the future that we are not able to accurately predict or control. Accordingly, we do not undertake any obligation to update any forward-looking statements for any reason, even if new information becomes available or other events occur in the future and thus you should not unduly rely on these statements.

The forward-looking statements included herein are based on current expectations that involve several risks and uncertainties set forth under "Risk Factors" in our Annual Report on Form 10-K as of and for the year ended December 31, 2016, Part II, Section 1A, herein, and other periodic reports filed with the United States Securities and Exchange Commission ("SEC"). Accordingly, to the extent that this Report contains forward-looking statements regarding the financial condition, operating results, business prospects or any other aspect of the Company, please be advised that the Company's actual financial condition, operating results and business performance may differ materially from that projected or estimated by the Company in forward-looking statements and thus you should not unduly rely on these statements.

Overview

We have been engaged in the discovery and development of proprietary human monoclonal antibody products for the diagnosis and treatment of a variety of cancers. We have discovered a pipeline of human monoclonal antibody products based on the protective immune responses generated by patients who have been vaccinated against targeted cancers. Therapeutic vaccines under development were discovered at Memorial Sloan Kettering Cancer Center, or MSK, and are exclusively licensed to MabVax Therapeutics. We operate in only one business segment. We have incurred substantial losses since inception, and we expect to incur additional substantial losses for the foreseeable future as we continue our research and development activities. To date, we have funded our operations primarily through government grants, proceeds from the sale of common and preferred stock, the issuance of debt, the issuance of common stock in lieu of cash for services, payments from collaborators and interest income. The process of developing our product candidates will require significant additional research and development, preclinical testing and clinical trials, as well as regulatory approval. We expect these activities, together with general and administrative expenses, to result in substantial operating losses for the foreseeable future. We will not receive product revenue unless we, or our collaborative partners, complete clinical trials, obtain regulatory approval and successfully commercialize one or more of our products. We cannot provide assurance that we will ever generate revenues or achieve and sustain profitability in the future or obtain the necessary working capital for our operations.

On July 24, 2017, the Company announced that the Board of Directors authorized the Company to engage an independent financial advisory firm to assist the Company in exploring and evaluating strategic options with the goal of maximizing shareholder value. The Company will continue to work in earnest to advance its clinical programs and validate its platform technology, including the recent commencement of patient dosing in the Phase 1 MVT-1075 Radioimmunotherapy clinical trial for the treatment of pancreatic, colon and lung cancers, and remains committed to this continued progression. As part of the Company's ongoing evaluation and prioritization of its portfolio of assets, and in response to inbound inquiries, the Company plans to engage an industry-leading firm to advise us on potential alternatives and strategies that will have the potential to unlock shareholder value.

The financial advisory firm will be assisting the Company in evaluating transaction options currently being considered, which could include the acquisition of MabVax by another company, the sale or divestiture of specific assets, merging with another company, licensing of selected technologies or a combination of selected divestitures followed by a reverse merger. MabVax does not have a defined timeline for the exploration of strategic alternatives and is not confirming that the evaluation will result in any strategic alternative being announced or consummated. The Company does not intend to discuss or disclose further developments during this process unless and until its Board of Directors has approved a specific action or otherwise determined that further disclosure is appropriate.

During the six months ended June 30, 2017, our loss from operations was $10,833,056, our net loss was $11,344,722, and our loss to common stockholders was $16,584,135. Net cash used in operating activities for the six months ended June 30, 2017 was $6,025,305 and cash and cash equivalents and working capital deficit as of June 30, 2017, were $1,846,906 and $5,060,672, respectively. As of June 30, 2017, we had an accumulated deficit of $94,846,396 and a stockholders' equity of $86,814.

We are subject to risks common to biopharmaceutical companies, including the need for capital, risks inherent in our research, development and commercialization efforts, preclinical testing, clinical trials, uncertainty of regulatory and marketing approvals, enforcement of patent and proprietary rights, potential competition and retention of key employees. In order for a product to be commercialized, it will be necessary for us to conduct preclinical tests and clinical trials, demonstrate efficacy and safety of our product candidates to the satisfaction of regulatory authorities, obtain marketing approval, enter into manufacturing, distribution and marketing arrangements, obtain market acceptance and, in many cases, obtain adequate reimbursement from government and private insurers. We cannot provide assurance that we will ever generate revenues or achieve and sustain profitability in the future or obtain the necessary working capital for our operations.

Reverse Stock Split and Listing on NASDAQ

On August 16, 2016, we filed a certificate of amendment to our Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware in order to effectuate a reverse stock split of our issued and outstanding common stock on a 1 for 7.4 basis, effective on August 16, 2016. The reverse split was effective with The Financial Industry Regulatory Authority (FINRA), and the Company's common stock began trading on The NASDAQ Capital Market at the open of business on August 17, 2016. All share and per share amounts, and number of shares of common stock into which each share of preferred stock will convert, in the financial statements and notes thereto have been retroactively adjusted for all periods presented to give effect to the Listing Reverse Split, including reclassifying an amount equal to the reduction in par value of common stock to additional paid-in capital.

Our Clinical Development Programs and Plans for 2017

MVT-5873 – for the Treatment of Pancreatic Cancer

We reported results from our Phase 1 clinical trial of therapeutic antibody MVT-5873, which is being evaluated to treat patients with advanced pancreatic cancer and other CA19-9 positive cancers in a poster presentation at the American Society of Clinical Oncology (ASCO) Annual Meeting on June 3, 2017. The Company highlighted that the single agent MVT-5837 appears safe and well tolerated in patients at biologically active doses. Furthermore, all patients were evaluated by RECIST 1.1 for tumor response, and the Company reported 11 patients achieved stable disease in this dose escalation safety trial of 32 patients.

The results of the Phase 1a trial with MVT-5873 indicate that this fully-human antibody targeting CA19-9 cancers can be administered at doses with acceptable safety and with a potentially positive impact on disease. CA19-9 is broadly expressed in various cancers including pancreatic, colon, and small cell lung cancer making this antibody potentially useful for a larger patient population. The early clinical efficacy signals from an identifiable subset of subjects enabled us to understand those patients most likely to respond to a MVT-5873 based therapy. At the maximum tolerated dose (MTD) established in this trial, we have demonstrated an acceptable safety margin and have cleared the way for MVT-5873 in combination with our immunoPET imaging agent (MVT-2163) and Radioimmunotherapy (MVT-1075) which are currently in Phase 1 clinical trials.

The recently completed Phase 1a trial was an open-label, dose-escalation study evaluating the safety, tolerability and pharmacokinetics of MVT-5873 as a single-agent in patients with locally advanced or metastatic pancreatic or colon cancer who had failed all prior therapies and regressed into progressive disease. Secondary endpoints included evaluation of tumor response by RECIST 1.1 and duration of response. A second arm of the MVT-5873 Phase 1a trial is actively evaluating MVT-5873 in combination with gemcitabine plus nab-paclitaxel in newly diagnosed pancreatic cancer patients. Dr. Eileen O'Reilly, Associate Director of the David M. Rubenstein Center for Pancreatic Cancer Research, attending physician, member at Memorial Sloan Kettering Cancer Center and Professor of Medicine at Weill Cornell Medical College, is the lead investigator in the MVT-5873 Phase 1 clinical trial.

MVT-2163 –as an Imaging Agent for Pancreatic Cancer

We initiated the MVT-2163 phase I trial in June 2016 to evaluate our next generation diagnostic PET imaging agent in patients with locally advanced or metastatic adenocarcinoma of the pancreas (PDAC) or other CA19-9 positive malignancies. MVT-2163 (89Zr-HuMab-5B1) combines the well-established PET imaging radiolabel Zirconium-89 [89Zr] with the targeting specificity of MVT-5873. We designed the trial to establish safety, pharmacokinetics, biodistribution, optimal time to obtain the PET image, and the amount of MVT-5873 to be used prior to administration of MVT-2163 to obtain optimized PET scan images.

We reported results from our Phase 1a clinical trial of ImmunoPET imaging agent, MVT-2163, for patients with locally advanced or metastatic adenocarcinoma of the pancreas (PDAC) or other CA19-9 positive malignancies in a poster presentation and podium talk at the Society of Nuclear Medicine and Molecular Imaging (SNMMI) Annual Meeting held in Denver, CO on June 10-14, 2017.

As of July 2017, twelve patients have been treated in this first-in-human trial evaluating the safety and feasibility of MVT-2163 to image pancreatic tumors and other CA19-9 positive malignancies. MVT-2163 was administered alone and in combination with MVT-5873 and was well tolerated in all cohorts. The only toxicities were infusion reactions that resolved on the day of the injection, with some patients requiring standard supportive medication.

Uptake of MVT-2163 was observed in primary tumors and metastases as early as day 2 and continuously through day 7. Standard Uptake Values (SUV), a measurement of activity in PET imaging, reached as high as 101 in the study. The investors reported that the high SUV is amongst the highest lesion uptake they have ever seen for a radiolabeled antibody. Bone and soft tissue disease were readily visualized and lesion uptake of the radiotracer was higher than typically seen with PET imaging agents. The correlation with Computerized Tomography (CT) scans was high.

We reported that MVT-5873 cold antibody pre-dose reduces liver SUV facilitating detection of liver metastases. In addition, we determined that the MVT-5873 cold antibody pre-dose does not interfere with the uptake of MVT-2163 on cancer lesions.

The MVT-2163 product produced acceptable safety tolerability, pharmacokinetics and biodistribution. MVT-2163 also produced high quality PET images identifying both primary tumor and metastatic sites. There was a promising correlation with diagnostic CT that warrants further studies correlating these findings with histopathology to assess the accuracy of MVT-2163 in identifying smaller metastatic nodes below the detection level of standard CT scans. The continual increase in high SUV values on cancer lesions in this study supports the use of the Company's MVT-1075 Radioimmunotherapy product which utilizes the same antibody to deliver a radiation dose for the treatment of patients with pancreatic, lung and colon cancers.

Plan for remainder of 2017 – In consultation with our clinical investigators, we plan to expand our Phase 1 program later in 2017 to include additional patients who will consent to have the smaller potential metastatic sites being seen with MVT-2163 images biopsied to provide evidence that MVT-2163 is identifying previously unseen disease. Better understanding of the extent and spread of the cancer will significantly improve the clinical decision regarding eligibility for curative surgery. We expect to have results of biopsies later in 2017.

MVT-1075 –as a Radioimmunotherapy for Pancreatic Cancer

We recently initiated a Phase 1 clinical trial our HuMab-5B1 radioimmunotherapy product that we have designated as MVT-1075. MVT-1075 combines the demonstrated targeting specificity of the HuMab-5B1 antibody with the proven clinical success of a low-energy radiation emitter, 177Lutetium [177Lu]. We dosed our first patient in June of this year. This Phase 1 first-in-human clinical trial is an open-label, multi-center study evaluating the safety and efficacy of MVT-1075 in up to 22 patients with CA19-9 positive malignancies in the U.S. The primary objective is to determine the maximum tolerated dose and safety profile in patients with recurring disease who have failed prior therapies. Secondary endpoints are to evaluate tumor response rate and duration of response by RECIST 1.1, and to determine dosimetry and pharmacokinetics. This dose-escalation study utilizes a traditional 3+3 design. The investigative sites will include Honor Health in Scottsdale, Arizona and Memorial Sloan Kettering Cancer Center in New York City.

Supporting the MVT-1075 RIT clinical investigation are the Company's successful Phase 1a safety and target specificity data reported at the annual meetings of the American Society for Clinical Oncology (ASCO) and the Society for Nuclear Medicine and Molecular Imaging(SNMMI) in June 2017, including the clinical results for the Company's HuMab-5B1 products, MVT-5873, a single agent therapeutic antibody and MVT-2163, an immuno-PET imaging agent. The combined results from 50 patients in the Phase 1 MVT-5873 and MVT-2163 studies, established safety and provided significant insight into drug biodistribution and an optimal dosing strategy, which the Company has incorporated into the MVT-1075 program. In April 2017, we reported preclinical results for MVT-1075 at the American Association of Clinical Research (AACR) Annual Meeting, demonstrating marked suppression, and in some instances, regression of tumor growth in xenograft animal models of pancreatic cancer, potentially making this product an important new therapeutic agent in the treatment of pancreatic, colon and lung cancers.

RESULTS OF OPERATIONS

We are providing the following information about our revenues, expenses, cash and liquidity.

Comparison of the Three and Six Months Ended June 30, 2017 and 2016

Revenues:

	Three Months Ended June 30,		% Increase/	Six Months Ended June 30,		% Increase/
	2017	2016	(Decrease)	2017	2016	(Decrease)
Revenues	$ —	$ —	(0)%	$ —	$ 148,054	(100)%

For the three months ended June 30, 2017 and 2016, we had no revenues recorded. We had completed the current Phase of the NIH Imaging Contract during the first quarter of the prior year.

For the six months ended June 30, 2017, we recognized no revenues, as compared to $148,054 for the same period in the prior year. This decrease was due to the completion of the current Phase of the NIH Imaging Contract during the first quarter of the prior year.

Research and development expenses:

	Three Months Ended June 30,		% Increase/	Six Months Ended June 30,		% Increase/
	2017	2016	(Decrease)	2017	2016	(Decrease)
Research and development	$2,332,700	$1,596,002	46.2%	$5,151,064	$3,296,514	56.3%

For the three months ended June 30, 2017, we incurred research and development expenses of $2,332,700, as compared to $1,596,002 for the same period a year ago. Stock-based compensation expense included in research and development expenses for the three months ended June 30, 2017 and 2016 was $376,684 and $284,057, respectively. Increased expenses in the three months ended June 30, 2017, compared to the same period in the prior year are primarily due to increased spending on our Phase I clinical trials of MVT-5873 as a therapeutic and MVT-2163 as a diagnostic for pancreatic cancer and other CA 19.9 malignancies, and in-house staffing to support preclinical and clinical development efforts in support of our programs.

For the six months ended June 30, 2017, we incurred research and development expenses of $5,151,064, as compared to $3,296,514 for the same period a year ago. Stock-based compensation expense included in research and development expenses for the six months ended June 30, 2017 and 2016 was $697,359 and $587,681, respectively. Increased expenses in the six months ended June 30, 2017, compared to the same period in the prior year are primarily due to increased spending on our Phase I clinical trials of MVT-5873 as a therapeutic and MVT-2163 as a diagnostic for pancreatic cancer and other CA 19.9 malignancies, and in-house staffing to support preclinical and clinical development efforts in support of our programs.

General and administrative expenses:

	Three Months Ended June 30,		% Increase/	Six Months Ended June 30,		% Increase/
	2017	2016	(Decrease)	2017	2016	(Decrease)
General and administrative	$3,408,042	$1,929,166	76.7%	$5,681,992	$4,581,005	24.0%

For the three months ended June 30, 2017, we incurred general and administrative expenses of $3,408,042, as compared to $1,929,166 for the same period a year ago. Stock-based compensation expense included in general and administrative expenses for the three months ended June 30, 2017 and 2016 was $2,093,140 and $673,506, respectively. Stock-based compensation expense for the three months ended June 30, 2017 and 2016 included $6,950 and $18,904 in restricted stock for services, respectively. The increase in general and administrative expenses was primarily due to higher stock-based compensation expenses of $1,438,537 mainly due to current quarter option grants, higher investor relations costs of $141,082 related to hiring a new investor relations firm and social media firm, and increased tax related costs of $57,954, partially offset by lower legal costs of $111,142 compared to the same period last year.

For the six months ended June 30, 2017, we incurred general and administrative expenses of $5,681,992, as compared to $4,581,005 for the same period a year ago. Stock-based compensation expense included in general and administrative expenses for the six months ended June 30, 2017 and 2016 was $2,805,277 and $1,903,770, respectively. Stock-based compensation expense for the six months ended June 30, 2017 and 2016 included $63,550 and $592,329 in restricted stock for services, respectively. The increase in general and administrative expenses was primarily due to higher stock-based compensation expenses of $1,493,833 mainly due to current quarter option grants, higher salaries and wages expense of $140,461, higher investor relations costs of $123,732 related to hiring a new investor relations firm and social media firm and increased tax related costs of $101,954, partially offset by lower expenses for stock issued for business development expenses of $578,779, lower consulting costs of $143,554, and lower legal costs of $84,233 compared to the same period last year.

Interest income and other income (expense):

	Three Months Ended June 30,		% Increase/	Six Months Ended June 30,		% Increase/
	2017	2016	(Decrease)	2017	2016	(Decrease)
Interest and other expense	$(249,127)	$ (262,807)	(5.2)%	$ (511,666)	$ (463,280)	10.4%

Interest and other expense was $249,127 and $262,807 for the three months ended June 30, 2017 and 2016, respectively. The amount for the three months ended June 30, 2017, consisted primarily of $150,634 of interest expense related to interest on the Company's term loan from Oxford Finance, $43,619 of financing cost amortization, $54,760 of warrant amortization and other items of $114. The amount for the three months ended June 30, 2016, consisted primarily of $155,512 of interest expense related to interest on the Company's term loan from Oxford Finance, LLC ("Oxford Finance"), $47,584 of financing cost amortization, and $59,738 of warrant amortization partially offset by interest income of $6.

The amount of interest and other expense for the six months ended June 30, 2017, consisted primarily of $307,292 interest expense related the Company's term loan from Oxford Finance, $90,762 of financing cost amortization, $113,945 of warrant amortization and other items of $333. The amount for the six months ended June 30, 2016, consisted primarily of $284,440 interest expense related to interest on the Company's term loan from Oxford Finance, $79,289 of financing cost amortization, and $99,563 of warrant amortization partially offset by interest income of $12.

The fair value of the warrants issued to Oxford Finance related to the term loan was recorded as a discount to the value of the note payable, and is amortized over the term of the loan. Financing costs incurred related to the term loan are also amortized over the term of the loan.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements as well as the reported revenues and expenses during the reporting periods. On an on-going basis, we evaluate our estimates and judgments related to our operating costs. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates under different assumptions or conditions.

Our critical accounting policies include:

Revenue recognition. Revenue from grants is based upon internal and subcontractor costs incurred that are specifically covered by the grant, including a facilities and administrative rate that provides funding for overhead expenses. NIH grants are recognized when we incur internal expenses that are specifically related to each grant, in clinical trials at the clinical trial sites, by subcontractors who manage the clinical trials, and provided the grant has been approved for payment. U.S. grant awards are based upon internal research and development costs incurred that are specifically covered by the grant, and revenues are recognized when we incur internal expenses that are related to the approved grant.

Any amounts received by us pursuant to the NIH grants prior to satisfying our revenue recognition criteria are recorded as deferred revenue.

Clinical trial expenses. We accrue clinical trial expenses based on work performed. In determining the amount to accrue, we rely on estimates of total costs incurred based on the enrollment of subjects, the completion of trials and other events defined in contracts. We follow this method because we believe reasonably dependable estimates of the costs applicable to various stages of a clinical trial can be made. However, the actual costs and timing of clinical trials are highly uncertain, subject to risks, and may change depending on several factors. Differences between the actual clinical trial costs and the estimated clinical trial costs that we have accrued in any prior period are recognized in the subsequent period in which the actual costs become known. Historically, these differences have not been material; however, material differences could occur in the future.

Stock-based compensation. Our stock-based compensation programs include grants of stock options and restricted stock to employees, non-employee directors and non-employee consultants. Stock-based compensation cost is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense, under the straight-line method, over the employee, non-employee director or non-employee consultant's requisite service period (generally the vesting period of the equity grant).

We account for equity instruments, including stock options and restricted stock, issued to employees and non-employees in accordance with authoritative guidance for equity based payments. Stock options issued are accounted for at their estimated fair value determined using the Black-Scholes-Merton option-pricing model, and restricted stock is accounted for using the grant date fair value of our common stock granted. The fair value of options and restricted stock granted to non-employees is re-measured as they vest, and the resulting increase in value, if any, is recognized as expense during the period the related services are rendered.

Impairment of Goodwill. The Company applies the GAAP principles related to Intangibles – Goodwill and Other related to performing a test for goodwill impairment annually. During the quarter ended June 30, 2017, due to the Company's determination to explore and evaluate strategic options, we performed a step 1 analysis and assessed the market value of the Company to determine whether an impairment had taken place. Based upon the analysis performed no impairment was noted, therefore performing step 2 was not required. We concluded that no impairment of Goodwill had taken place during the quarter ended June 30, 2017. Further, in performing a qualitative assessment, we concluded no events and circumstances had taken place that would have indicated that an impairment had taken place.

Income taxes. Significant judgment is required by management to determine our provision for income taxes, our deferred tax assets and liabilities, and the valuation allowance to record against our net deferred tax assets, which are based on complex and evolving tax regulations throughout the world. Our tax calculation is impacted by tax rates in the jurisdictions in which we are subject to tax and the relative amount of income earned in each jurisdiction. Our deferred tax assets and liabilities are determined using the enacted tax rates expected to be in effect for the years in which those tax assets are expected to be realized.

The effect of an uncertain income tax position is recognized as the largest amount that is "more-likely-than-not" to be sustained under audit by the taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained.

The realization of our deferred tax assets is dependent upon our ability to generate sufficient future taxable income. We establish a valuation allowance when it is more-likely-than-not that the future realization of all or some of the deferred tax assets will not be achieved. The evaluation of the need for a valuation allowance is performed on a jurisdiction-by-jurisdiction basis, and includes a review of all available evidence, both positive and negative. As of June 30, 2017, the Company concluded that it was more-likely-than-not that its deferred tax assets would not be realized, and a full valuation allowance has been recorded.

The above listing is not intended to be a comprehensive list of all of our accounting policies. In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP. See our audited consolidated financial statements and notes thereto included in our 2016 Annual Report on Form 10-K, which contain additional accounting policies and other disclosures required by GAAP.

LIQUIDITY AND CAPITAL RESOURCES

To date, we have funded our operations primarily through government grants, proceeds from the sale of common and preferred stock, the issuance of debt, the issuance of common stock in lieu of cash for services, payments from collaborators and interest income. We have experienced negative cash flow from operations each year since our inception. As of June 30, 2017, we had an accumulated deficit of $94,846,396 and stockholders' equity of $86,814. We expect to continue to incur increased expenses, resulting in losses, over the next several years due to, among other factors, our continuing and planned clinical trials and anticipated research and development activities, unless we can achieve a major license of one or more of our products under development. There can be no assurance that we will be able to achieve a license and earn revenues large enough to offset our operating expenses. We had cash of $1,846,906 and a working capital deficit of $5,060,672 as of June 30, 2017.

	June 30, 2017	December 31, 2016
Cash and cash equivalents	$ 1,846,906	$ 3,979,290
Working capital (deficit)	$ (5,060,672)	$ (1,396,656)
Current ratio	0.28:1	0.75:1

	Six Months Ended June 30,	
	2017	2016
Cash provided by (used in):		

Operating activities	$ (6,025,305)	$ (5,225,134)
Investing activities	$ (4,142)	$ (316,846)
Financing activities	$ 3,897,063	$ 4,429,946

Sources and Uses of Net Cash for the Six Months Ended June 30, 2017

Net cash used in operating activities was $6,025,305 for the six months ended June 30, 2017, compared to $5,225,134 in the comparable period a year ago. The net cash used in both periods was primarily attributable to the net losses, adjusted to exclude certain non-cash items, primarily stock-based compensation and amortization of finance costs related to the term loan. Net cash used in operating activities for the six months ended June 30, 2017 was also impacted by an increase of $931,817 in accounts payable related primarily to research contract services and an increase in accrued clinical operation and site costs of $424,738.

The net cash used in investing activities for the six months ended June 30, 2017 and 2016, amounted to $4,142 and $316,846, respectively, primarily as a result of purchase of lab equipment in the corresponding periods.

Net cash provided by financing activities was $3,897,063 for the six months ended June 30, 2017, compared to $4,429,946 in the comparable period in 2016. Net cash provided by financing activities for the six months ended June 30, 2017 was attributable to the net proceeds from the May 2017 Private Placement and the May 2017 Public Offering during the second quarter of 2017. Net cash provided by financing activities for the six months ended June 30, 2016 was attributable to the net proceeds from the term loan during the first quarter in 2016.

On May 3, 2017, we sold 850 shares of Series H Preferred Stock at a stated value of $1,000 per share, representing an aggregate of $850,000 in the May 2017 Private Placement, to certain existing investors. The shares of Series H Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series H Preferred Stock, plus the Base Amount, if any, on such Series H Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series H Preferred Stock is $1,000 and the initial conversion price is $1.75 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. This financing is discussed in further detail in Note 5, Convertible Preferred Stock, Common Stock and Warrants of the Notes to Unaudited Condensed Consolidated Financial Statements included herein.

On May 19, 2017, we closed a public offering of 1,342,858 shares of common stock and 1,000,000 shares of newly designated 0% Series G Convertible Preferred Stock (the "Series G Preferred Stock"), at $1.75 per share of common stock and Series G Preferred Stock (the "May 2017 Public Offering"). The Series G Preferred Stock is initially convertible into 1,000,000 shares of common stock, subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events, to certain existing investors in the offering who, as a result of their purchases of common stock, would hold in excess of 4.99% of our issued and outstanding common stock, and elect to receive shares of our Series G Preferred Stock. This offering is discussed in further detail in Note 5, Convertible Preferred Stock, Common Stock and Warrants of the Notes to Unaudited Condensed Consolidated Financial Statements included herein. We received $4,100,000 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling $397,743.

On July 27, 2017, we entered into a subscription agreement with an accredited investor pursuant to which we agreed to sell an aggregate of $125,000 in common stock under terms similar to the May 2017 Public Offering. The transaction closed on August 2, 2017, as further described in Note 12, Subsequent Events.

On August 11, 2017, we entered into a security purchase agreement with a group of existing investors in the Company, where we sold 2,386.36 shares of 0% Series J Convertible Preferred Stock to be issued ("the Series J Preferred Stock"), at a stated value of $550 per share, representing an aggregate of approximately $1,312,500 before offering costs estimated at approximately $130,000 in a registered direct offering (the "August 2017 Financing"). The shares of Series J Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series J Preferred Stock plus the Base Amount on such Series J Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series J Preferred Stock is $550 and the initial conversion price is $0.55 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events. This financing is discussed in further detail in Note 12, Subsequent Events.

We anticipate that the Company will continue to incur net losses into the foreseeable future as we: (i) monitor the four patients remaining on therapy in our Phase I clinical trial of MVT-5873 until therapy is discontinued; (ii) continue our clinical trial for the development of MVT-1075 as a radioimmunotherapy; and (iii) continue operations as a public company. Based on receipt of $850,000 from our May 2017 Private Placement, $4.1 million from the May 2017 Public Offering, the $125,000 private placement in July 2017, and the $1.3 million in securities purchase agreements signed in August 2017, and without any other additional funding or receipt of payments from potential licensing agreements, we expect we will have sufficient funds to meet our obligations through October 2017. These conditions give rise to substantial doubt as to the Company's ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We plan to continue to fund the Company's losses from operations and capital funding needs through equity or debt financings, strategic collaborations, licensing arrangements, government grants or other arrangements. Further, to extend availability of existing cash available for our programs for the purpose of achieving milestones or a strategic transaction, we have cut personnel and other operating expenses substantially following the completion of two clinical development programs, and management has volunteered to defer receiving portions of salaries until one or more business transactions can be achieved, as discussed further in Note 12, Subsequent Events. For example, we were able to reduce costs following completion of two phase 1a clinical trials of our lead antibody HuMab 5B1, which has enabled us to reduce our expenditures on clinical trials while we continue with our radioimmunotherapy product MVT-1075 discussed further in Management's Discussion and Analysis of Financial Condition and Results of Operations. Further, we have reduced our personnel from 25 full time employees to 13 full time employees with the completion of our two clinical trials. However, we cannot be sure that capital funding will be available on reasonable terms, or at all, and that our staff reductions to fit ongoing needs will be sufficient. If we are unable to secure adequate additional funding, we may be forced to make additional reductions in spending, incur further cutbacks in personnel, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. In addition, if

the Company does not meet its payment obligations to third parties as they come due, it may be subject to litigation claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. Any of these actions could materially harm the Company's business, results of operations, and prospects. These conditions give rise to substantial doubt as to the Company's ability to continue as a going concern.

Future Contractual Obligations

On September 2, 2015, the Company entered into a lease (the "Lease") with AGP Sorrento Business Complex, L.P., for certain premises consisting of a total of approximately 14,971 square feet of office and laboratory space in buildings located at 11535-11585 Sorrento Valley Rd., San Diego, California, to serve as the Company's corporate offices and laboratories (the "New Premises"). Because certain tenant improvements needed to be made to the New Premises before the Company could occupy the New Premises, the term of the Lease commenced on February 5, 2015. The Lease terminates six years after such term commencement date, unless earlier terminated in accordance with the Lease. Pursuant to the terms of the Lease, the current monthly base rent paid by the Company is $36,699, subject to annual increases as set forth in the Lease.

The Company has an option to extend the Lease term for a single, five-year period. If the Lease term is extended for the optional five-year period, the monthly base rent will be adjusted based on fair market rental value. In addition to rent, the Company agreed to pay a portion of the taxes and utility, maintenance and other operating costs paid or accrued in connection with the ownership and operation of the property.

Our master lease and sublease of our facility located at 3165 Porter Drive in Palo Alto, California were terminated on February 28, 2013, and we entered into a termination agreement with ARE-San Francisco No. 24 ("ARE") on February 19, 2013 to voluntarily surrender its premises. Because of the termination agreement, we were relieved of further obligations under the master lease and further rights to rental income under the sublease and paid a termination fee of approximately $700,000. In addition to the termination fee, if we receive $15 million or more in additional financing, in the aggregate, an additional termination fee of $590,504 will be due to ARE. The additional financing was achieved in 2015 and the termination fee is reflected on the condensed consolidated balance sheet as an accrued lease contingency fee.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)", which contains new accounting literature relating to how and when a company recognizes revenue. Under ASU 2017-09, a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods and services. ASU 2014-09 is effective for the Company's fiscal year beginning January 1, 2018, which reflects a one year deferral approved by the FASB in July 2015, and will be adopted by the Company from January 1, 2018. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In February 2016, the FASB issued ASU 2016-2,"Leases (Topic 842)." This update will increase transparency and comparability by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. Under the new guidance, lessees will be required to recognize the following for all leases (except for short-term leases) at the commencement date (i) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (ii) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Under the new guidance, lessor accounting is largely unchanged, and it simplified the accounting for sale and leaseback transactions. Lessees will no longer be provided with a source of off-balance sheet financing. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. The standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We are currently in the process of assessing what impact this new standard may have on our condensed consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, "Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." This update includes multiple provisions intended to simplify various aspects of the accounting for share-based payment transactions including accounting for excess tax benefits and tax deficiencies, classification of excess tax benefits in the statement of cash flows and accounting for award forfeitures. This update is effective for annual and interim reporting periods of public entities beginning after December 15, 2016, with early adoption permitted. The adoption of this new standard did not have a material impact on our condensed consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic326): Measurement of Credit Losses on Financial Instruments". This ASU requires instruments measured at amortized cost to be presented at the net amount expected to be collected. Entities are also required to record allowances for available-for-sale debt securities rather than reduce the carrying amount. This ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15 ("ASU 2016-15"), "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." The standard provides guidance on eight (8) cash flow issues: (1) debt prepayment or debt extinguishment costs; (2) settlement of zero-coupon bonds; (3) contingent consideration payments after a business combination; (4) proceeds from the settlement of insurance claims; (5) proceeds from the settlement of corporate-owned life insurance policies; (6) distributions received from equity method investees; (7) beneficial interests in securitization transactions; and (8) separately identifiable cash flows and application of the predominance principle. ASU 2016-15 addresses how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017 with early adoption permitted. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory." This ASU requires the recognition of the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The amendments in this ASU should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-03, "Accounting Changes and Error Corrections (Topic 250) and Investments—Equity Method and Joint Ventures (Topic 323)." This ASU amends the disclosure requirements for ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)," ASU No. 2016-02, "Leases (Topic 842) and ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." This ASU states that if a registrant does not know or cannot reasonably estimate the impact that the adoption of the above ASUs is expected to have on the financial statements, then in addition to making a statement to that effect, the registrant should consider additional qualitative financial statement disclosures to assist the reader in assessing the significance of the impact that the standard will have on the financial statements of the registrant when adopted. This ASU was effective upon issuance. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." This ASU eliminates Step 2 from the goodwill impairment test. Instead, an entity should recognize an impairment charge for the amount by which the carrying value exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to that reporting unit. This ASU is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805): Clarifying the Definition of a Business." This ASU clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This ASU is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. We expect the adoption of this new standard will not have a material impact on our condensed consolidated financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standards if currently adopted would have a material effect on the accompanying condensed consolidated financial statements.

Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Sensitivity

Our cash and cash equivalents of $1,846,906 at June 30, 2017, consisted of cash and money market funds, all of which will be used for working capital purposes. We do not enter into investments for trading or speculative purposes. Our primary exposure to market risk is related to the variability of interest rates on our term loan with Oxford Finance, LLC initiated in January 2016. Under the loan agreement the interest rate for the term loan is set monthly at an Index Rate plus 11.29%, where the Index Rate is the greater of the 30-day LIBOR rate or 0.21%. Interest is due on the first day of each month, in arrears, calculated based on a 360-day year. In addition, interest income on our deposits are affected by changes in the general level of interest rates in the United States. Because of the short-term nature of our cash and cash equivalents, we do not believe that we have any material exposure to changes in their fair values as a result of changes in interest rates. The continuation of historically low interest rates in the United States will limit our earnings on investments held in U.S. dollars.

We do not hold any derivative financial instruments or commodity-based instruments.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

As required by Rules 13a-15 and 15d-15 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Company has evaluated, with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, the effectiveness of its disclosure controls and procedures (as defined in such rules) as of the end of the period covered by this report. The Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective as of June 30, 2017.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

As required by Rule 13a-15(d) of the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation of the internal control over financial reporting to determine whether any changes occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, our principal executive officer and principal financial officer concluded there were no changes in our internal controls over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that could significantly affect internal controls over financial reporting as of June 30, 2017.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

RISK FACTORS

We will be required to raise additional funds to finance our operations and remain a going concern; we may not be able to do so when necessary, and/or the terms of any financings may not be advantageous to us, requiring cutbacks in programs and personnel.

Our operations to date have consumed substantial amounts of cash. Negative cash flows from our operations are expected to continue for the foreseeable future until strategic options are found to maximize stockholder value. Our cash utilization amount is highly dependent on the progress of our product development programs, particularly, the results of our preclinical and clinical studies and those of our partners, the cost, timing and outcomes of regulatory approval for our product candidates, and the rate of recruitment of patients in our human clinical trials. In addition, the further development of our ongoing clinical trials will depend on upcoming analysis and results of those studies and our financial resources at that time.

We will require future additional capital infusions including public or private financing, strategic partnerships or other arrangements with organizations that have capabilities and/or products that are complementary to our own capabilities and/or products, in order to continue the development of our product candidates. After completing two phase 1a clinical trials, we reduced our personnel from 25 full time employees to 13, and management is deferring portions of management's salaries, to conserve cash for use in our clinical trial of MVT-1075. However, we cannot be sure that our staff reductions will enable us continue to move as quickly as we would like to move in our clinical trial. Further, we cannot be sure that availability of capital funding will be on reasonable terms, or at all. If we are unable to secure adequate additional funding, we may be forced to make additional reductions in spending, incur further cutbacks in personnel, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. In addition, if the Company does not meet its payment obligations to third parties as they come due, it may be subject to litigation claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. Any of these actions could materially harm the Company’s business, results of operations, and prospects. Further, there can be no assurances that we will complete any financings, strategic alliances or collaborative development agreements, and the terms of such arrangements may not be advantageous to us. Any additional equity financing will be dilutive to our current stockholders and debt financing, if available, may involve restrictive covenants. If we raise funds through collaborative or licensing arrangements, we may be required to relinquish, on terms that are not favorable to us, rights to some of our technologies or product candidates that we would otherwise seek to develop or commercialize. Our failure to raise capital when needed could materially harm our business, financial condition and results of operations.

Additionally we granted the Lead Investor in the May 2017 Public Offering the May 2017 Consent Right to approve future (i) issuances of our securities, (ii) equity or debt financings and (iii) sales of any development product assets currently held by us, subject to certain exceptions, if such securities are sold at price below $2.50 per share and for as long as the Lead Investor in the offering holds 50% or more of the shares of Series G Preferred Stock purchased by the Lead Investor in this offering. All other prior consent rights of the Lead Investor have been superseded by the May 2017 Consent Right.

Should the May 2017 Consent Right be required in connection with future offerings, we may be required again to provide additional consideration, including, but not limited to, consideration in the form of cash and/or additional shares of our capital stock and/or securities convertible into or exercisable for shares of our capital stock, in order to obtain the May 2017 Consent Right. If we are unable to obtain the May 2017 Consent Right when necessary for future offerings, we may be unable to raise additional funds. An inability to raise additional funds could have a material adverse effect on our financial condition, results of operations, ability to conduct our business and on the price of our common stock.

Our ongoing capital requirements will depend on numerous factors, including: the progress and results of preclinical testing and clinical trials of our product candidates under development; the costs of complying with the FDA and other domestic and foreign regulatory agency requirements, the progress of our research and development programs and those of our partners; the time and costs expended and required to obtain any necessary or desired regulatory approvals; the resources that we devote to manufacturing expenditures; our ability to enter into licensing arrangements, including any unanticipated licensing arrangements that may be necessary to enable us to continue our development and clinical trial programs; the costs and expenses of filing, prosecuting and, if necessary, enforcing our patent claims, or defending against possible claims of infringement by third-party patent or other technology rights; the cost of commercialization activities and arrangements, if any, that we undertake; and, if and when approved, the demand for our products, which demand depends in turn on circumstances and uncertainties that cannot be fully known, understood or quantified unless and until the time of approval, including the range of indications for which any product is granted approval.

Our restated certificate of incorporation, our amended and restated by-laws and Delaware law could deter a change of our management which could discourage or delay offers to acquire us; certain restrictions in our agreements with existing stockholders could also discourage or delay offers to acquire us.

Certain provisions of Delaware law and of our restated certificate of incorporation, as amended, and amended and restated by-laws, could discourage or make it more difficult to accomplish a proxy contest or other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or in our best interests. These provisions include:

- establishing a classified Board of Directors requiring that members of the Board be elected in different years, which lengthens the time needed to elect a new majority of the Board;
- authorizing the issuance of "blank check" preferred stock that could be issued by our Board of Directors to increase the number of outstanding shares or change the balance of voting control and thwart a takeover attempt;
- prohibiting cumulative voting in the election of directors, which would otherwise allow for less than a majority of stockholders to elect director candidates;
- limiting the ability of stockholders to call special meetings of the stockholders;
- prohibiting stockholder action by written consent and requiring all stockholder actions to be taken at a meeting of our stockholders; and
- establishing 90 to 120-day advance notice requirements for nominations for election to the Board of Directors and for proposing matters that can be acted upon by stockholders at stockholder meetings.

Additionally we granted the Lead Investor in the May 2017 Public Offering the May 2017 Consent Right to approve future (i) issuances of our securities, (ii) equity or debt financings and (iii) sales of any development product assets currently held by us, subject to certain exceptions, if such securities are sold at price below $2.50 per share and for as long as the Lead Investor in the offering holds 50% or more of the shares of Series G Preferred Stock purchased by the Lead Investor in this offering. All other prior consent rights of the Lead Investor have been superseded by the May 2017 Consent Right.

Should the May 2017 Consent Right be required in connection with future offerings, we may be required again to provide additional consideration, including, but not limited to, consideration in the form of cash and/or additional shares of our capital stock and/or securities convertible into or exercisable for shares of our capital stock, in order to obtain the May 2017 Consent Right. If we are unable to obtain the May 2017 Consent Right when necessary for future offerings, we may be unable to raise additional funds. An inability to raise additional funds could have a material adverse effect on our financial condition, results of operations, ability to conduct our business and on the price of our common stock.

Our ongoing capital requirements will depend on numerous factors, including: the progress and results of preclinical testing and clinical trials of our product candidates under development; the costs of complying with the FDA and other domestic and foreign regulatory agency requirements, the progress of our research and development programs and those of our partners; the time and costs expended and required to obtain any necessary or desired regulatory approvals; the resources that we devote to manufacturing expenditures; our ability to enter into licensing arrangements, including any unanticipated licensing arrangements that may be necessary to enable us to continue our development and clinical trial programs; the costs and expenses of filing, prosecuting and, if necessary, enforcing our patent claims, or defending against possible claims of infringement by third-party patent or other technology rights; the cost of commercialization activities and arrangements, if any, that we undertake; and, if and when approved, the demand for our products, which demand depends in turn on circumstances and uncertainties that cannot be fully known, understood or quantified unless and until the time of approval, including the range of indications for which any product is granted approval.

Unless our common stock is listed on The NASDAQ Capital Market or other national securities exchange, it will be deemed a "penny stock," which would make it more difficult for our investors to sell their shares.

On August 17, 2016, we began trading on The NASDAQ Capital Market. If we fail to maintain our listing on The NASDAQ Capital Market or other national securities exchange, our common stock will be subject to the "penny stock" rules adopted under Section 15(g) of the Exchange Act. The penny stock rules generally apply to companies whose common stock is not listed on the NASDAQ Capital Market or other national securities exchange and trades at less than $4.00 per share, other than companies that have had average revenue of at least $6,000,000 for the last three years or that have tangible net worth of at least $5,000,000 ($2,000,000 if the company has been operating for three or more years). These rules require, among other things, that brokers who trade penny stock to persons other than "established customers" complete certain documentation, make suitability inquiries of investors and provide investors with certain information concerning trading in the security, including a risk disclosure document and quote information under certain circumstances. Many brokers have decided not to trade penny stocks because of the requirements of the penny stock rules and, thus, the number of broker-dealers willing to act as market makers in such securities is limited. If we remain subject to the penny stock rules for any significant period, it could have an adverse effect on the market, if any, for our securities. If our securities are subject to the penny stock rules, investors will find it more difficult to dispose of our securities.

Additionally, in order for our Company to continue trading on the NASDAQ Capital Market, we must maintain compliance with all of the criteria under at least one of the three continued listing standards: the Equity Standard, which includes a requirement for $2.5 million in stockholders' equity; the Market Value of Listed Securities Standard, which includes a requirement for a market value of listed securities of at least $35 million; or the Net Income Standard, which includes a requirement for net income of at least $500,000 from continuing operations in the latest fiscal year or in two of the last three fiscal years. As of June 30, 2017, we met none of the three standards; further, the closing price of our stock has been under $1.00 per share since July 11, 2017, which is also a listing maintenance requirement. As a result of these circumstances, we are currently evaluating various strategic options to maximize stockholder value and to maintain one or more listing standards, including scheduling a special meeting of stockholders to approve a reverse stock split to remain above the $1.00 market threshold. However, for future periods if we do not have a market value of listed securities of at least $35 million, or do not meet the Equity Standard, then we may have to enter into a license agreement or other strategic transaction on less favorable terms to generate near term revenues, or raise additional capital, which could be dilutive to the Company.

Other than set forth above, there have been no material changes to the Risk Factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2016.

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

May 2017 Private Placement

On May 3, 2017, we entered into separate subscription agreements with accredited investors pursuant to which we agreed to sell an aggregate of $850,000 of 0% Series H Convertible Preferred Stock. The shares of Series H Preferred Stock are convertible into shares of common stock based on a conversion calculation equal to the stated value of the Series H Preferred Stock, plus the Base Amount, if any, on such Series H Preferred Stock, as of such date of determination, divided by the conversion price. The stated value of each share of Series H Preferred Stock is $1,000 and the initial conversion price is $1.75 per share, each subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events.

On the closing date, we entered into separate registration rights agreements with each of the investors, pursuant to which we agreed to undertake to file a registration statement to register the resale of the shares within thirty (30) days following the closing date, to cause such registration statement to be declared effective by the Securities and Exchange Commission within sixty (60) days of the closing date and to maintain the effectiveness of the registration statement until all of such shares of Common Stock have been sold or are otherwise able to be sold pursuant to Rule 144 under the Securities Act, without any restrictions. We filed the registration statement which was declared effective on June 14, 2017.

The securities referenced above were issued in reliance on the exemption from registration afford by Rule 506 of Regulation D and/or Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving a public offering.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

None.

Item 5. Other Information.

As described in Note 12 herein, on August 11, 2017, we entered into securities purchase agreements to sell approximately 2,386.36 shares of a new Series J Preferred Stock, to be created with a stated value of $550 per share in our August 2017 Offering. The Series J Preferred Stock is initially convertible into approximately 3,400,000 shares of common stock at $0.55 per share, subject to adjustment for stock splits, stock dividends, recapitalizations, combinations, subdivisions or other similar events and was purchased by Prior Investors. The total amount of the securities purchase agreements amounted to approximately $1,312,500, before estimated expenses of $130,000. The Certificate of Designation for the Series J Preferred Stock shall include a 4.9% beneficial ownership conversion blocker, a 19.99% blocker provision to comply with Nasdaq Rules (the "19.99% Conversion Blocker") until stockholders have approved any or all shares of common stock issuable upon conversion of the Series J Preferred Stock, and a 125% liquidation preference.

In order to obtain the consent from the Lead Investor to the August 2017 Offering, we entered into a letter agreement on August 9, 2017 (the "August 2017 Letter Agreement"). Pursuant to the August 2017 Letter Agreement, we agreed to issue incentive shares (the "Incentive Shares") to Prior Investors as an incentive to invest in the August 2017 Offering. Such Prior Investors will be entitled to receive their pro rata share of 65,000 shares in the form of a new Series K Preferred Stock, to be created that is substantially similar to common stock. and convertible into 6,500,000 shares of common stock, subject to stockholder approval.

The August 2017 Letter Agreement also specified the following:

- That the Company file a proxy statement for a special meeting of stockholders within 10 days of closing the August 2017 Offering. Proposals shall include (i) an amendment to the Company's Certificate of Incorporation to effect a reverse stock split of its issued and outstanding common stock by a ratio of not less than one-for-two and not more than one-for-twenty at any time prior to one year from the date of the special meeting, with the exact ratio to be set at a whole number within this range as determined by the Board of Directors, (ii) the issuance of securities in one or more non-public offerings where the maximum discount at which securities will be offered will be equivalent to a discount of 30% below the market price of the common stock, as required by and inaccordance with Nasdaq Marketplace Rule 5635(d), (iii) the issuance of securities in one or more non-public offerings where the maximum discount at which securities will be offered will be equivalent to a discount of 20% below the market price of the Common Stock, as required by and in accordance with Nasdaq Marketplace Rule 5635(d), (iv) the issuance of the Series J Conversion Shares and (v) the issuance of the Inducement Shares.

- Lead Investor will commit to investing an additional $1,000,000 in a new private or public offering of up to $8,000,000 (the "$8,000,000 Financing"). The $8,000,000 Financing shall sign and close following shareholder approval of each of the proposals identified in the August 2017 Letter Agreement.

- That the employment terms of all management be reduced to two years from three years. and that management defer portions of their salary for the remainder of the year, which shall be paid upon the earlier of completion of the $8,000,000 Financing or a business transaction that represents, or transactions in the aggregate that represent, in excess of $10,000,000.

Item 6. Exhibits.

EXHIBIT INDEX

Exhibit No.	Description	Form	Filing Date/Period End	Exhibit Number
10.1	August Letter Agreement dated August 9, 2017*			
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*			
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*			
32	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**			
101	Interactive data file*	10-Q	6/30/2017	101

*Filed herewith

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.

Date: August 14, 2017

MABVAX THERAPEUTICS HOLDINGS, INC.

By: /s/ J. David Hansen
J. David Hansen
President and Chief Executive Officer (Principal Executive Officer authorized to sign on behalf of the registrant)

By: /s/ Gregory P. Hanson
Gregory P. Hanson
Chief Financial Officer (Principal Financial and Accounting Officer authorized to sign on behalf of the registrant)

Exhibit 31.1

Certification Under Section 302

I, J. David Hansen, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MabVax Therapeutics Holdings, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: August 14, 2017

By: /s/ J. David Hansen
J. David Hansen
Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

Certification Under Section 302

I, Gregory P. Hanson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MabVax Therapeutics Holdings, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: August 14, 2017

By: /s/ Gregory P. Hanson
Gregory P. Hanson
Chief Financial Officer (Principal Financial and Accounting Officer)

Exhibit 32

Certification
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of MabVax Therapeutics Holdings, Inc., does hereby certify, to such officer's knowledge, that:

The Quarterly Report on Form 10-Q of MabVax Therapeutics Holdings, Inc. for the three and six months ended June 30, 2017, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of MabVax Therapeutics Holdings, Inc.

Date: August 14, 2017 By: /s/ J. David Hansen
J. David Hansen
Chief Executive Officer (Principal Executive Officer)

Date: August 14, 2017 By: /s/ Gregory P. Hanson
Gregory P. Hanson
Chief Financial Officer (Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 10.1

MabVax Therapeutics Holdings, Inc.
11535 Sorrento Valley Rd., Suite 400
San Diego, CA 92121
Phone: (858) 259-9405

August 9, 2017

HS Contrarian Investments, LLC
68 Fiesta Way
Fort Lauderdale, FL 33301
Attn: John Stetson

Re: Letter Agreement

Dear Mr. Stetson,

MabVax Therapeutics Holdings, Inc. (the "Company") and HS Contrarian Investments, LLC ("HSCI") hereby agree pursuant to this agreement (this "Letter Agreement") that:

A. $2,350,000 Financing

HSCI and certain other investors shall purchase an aggregate of $2,350,000 securities of the Company in a registered direct offering (the "$2,350,000 Financing"). The $2,350,000 Financing shall consist of newly designated Series J Convertible Preferred Stock (the "Series J Preferred Stock"). The Series J Preferred Stock shall include a 125% liquidation preference, 4.99% beneficial ownership limitations, price protection with a $0.10 floor and a Nasdaq blocker. The purchase price per share of common stock issuable upon conversion of the Series J Preferred Stock (the "J Conversion Shares") shall be $0.55.

B. Inducement Shares

The Company shall issue newly designated shares of Series K Convertible Preferred Stock (the "Series K Preferred Stock") issuable into an aggregate of 6,500,000 shares in the form of Series K Preferred Stock (the "Inducement Shares") stock to be distributed to certain existing investors who participate in the $2,350,000 Financing. The Company shall issue the Series K Preferred Stock within three trading days of closing the $2,350,000 Financing. The Series K Preferred Stock shall be substantially similar to the common stock but include a 4.99% beneficial ownership blocker and may not be converted into common stock prior to obtaining shareholder approval.

C. Proxy Statement

The company shall file a proxy statement for a special meeting of shareholders within 10 days of closing the $2,350,000 Financing. Proposals shall include (i) an amendment to the Company's Certificate of Incorporation to effect a reverse stock split of its issued and outstanding common stock by a ratio of not less than one-for-two and not more than one-for-twenty at any time prior to one year from the date of the special meeting, with the exact ratio to be set at a whole number within this range as determined by the Board of Directors, (ii) the issuance of securities in one or more non-public offerings where the maximum discount at which securities will be offered will be equivalent to a discount of 30% below the market price of the common stock, as required by and in accordance with Nasdaq Marketplace Rule 5635(d), (iii) the issuance of securities in one or more non-public offerings where the maximum discount at which securities will be offered will be equivalent to a discount of 20% below the market price of the Common Stock, as required by and in accordance with Nasdaq Marketplace Rule 5635(d), (iv) the issuance of the Series J Conversion Shares and (v) the issuance of the Inducement Shares.

D. Follow-On Financing

HSCI will commit to investing an additional $1,000,000 in a new private or public offering of up to $8,000,000 (the "$8,000,000 Financing"). The $8,000,000 Financing shall sign and close following shareholder approval of each of the proposals identified in Section C of this letter.

E. Management

The employment terms of all management shall be reduced to two years from three years. Management shall defer portions of their salary for the remainder of the year, which shall be paid upon the earlier of completion of the $8,000,000 Financing or a business transaction that represents, or transactions in the aggregate that represent, in excess of $10,000,000.

F. Miscellaneous

The rights herein are specific to HSCI, and may only be exercised by the managing partner/president of HSCI which is John Stetson. Such rights shall not be assigned or transferred to or assumed by any other party or individual, voluntarily or by operation of law, and any such purported assignment, transfer or assumption shall be void and of no force or effect.

This Letter Agreement shall be governed by the laws of the state of New York, without giving effect to any conflict of laws provision, and may not be amended other than through a written agreement executed by the Company and HSCI.

As used herein, "HSCI" shall mean any person or entity controlled by, in control of, or in common control with John Stetson.

MabVax Therapeutics Holdings, Inc.

By: /s/ J. David Hansen
Name J. David Hansen
Title President and Chief Executive Officer

HS Contrarian Investments LLC

By: /s/ John Stetson
Name John Stetson
Title Manager