

**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, 2016

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
(STATE OR OTHER JURISDICTION OF
INCORPORATION OR ORGANIZATION)**

**93-0987903
(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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer (Do not check if a smaller reporting company)	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

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 11, 2016 was 31,307,770.

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PART 1. FINANCIAL INFORMATION

Item 1. Financial Statements

**MABVAX THERAPEUTICS HOLDINGS, INC.
Condensed Consolidated Balance Sheets**

	June 30, 2016	December 31, 2015
	(Unaudited)	(Note 1)
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,972,051	\$ 4,084,085
Grants receivable	—	757,562
Prepaid expenses	276,714	419,751
Other current assets	3,965	47,586
Total current assets	3,252,730	5,308,984
Property and equipment, net	515,522	135,486
Goodwill	6,826,003	6,826,003
Other long-term assets	346,233	126,654
Total assets	\$ 10,940,488	\$ 12,397,127
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 2,161,127	\$ 3,002,497
Accrued compensation	482,528	562,755
Accrued clinical operations and site costs	491,157	391,041
Accrued lease contingency fee	590,504	590,504
License fee payable	225,000	225,000
Other accrued expenses	412,373	186,566
Interest payable	50,500	—
Current portion of notes payable	694,444	—
Current portion of capital leases payable	16,303	—
Total current liabilities	5,123,936	4,958,363
Long-term liabilities:		
Long-term portion of notes payable	3,393,316	—
Long-term portion of capital leases	76,799	—
Other long-term liabilities	115,452	—
Total long-term liabilities	3,585,567	—
Commitments and contingencies		
Stockholders' equity:		
Series D convertible preferred stock, \$0.01 par value, 1,000,000 shares authorized, 173,288 and 191,490 shares issued and outstanding as of June 30, 2016 and December 31, 2015, respectively, with a liquidation preference of \$1,733 and \$1,915 as of June 30, 2016, and December 31, 2015, respectively	1,733	1,915
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
Common stock, \$0.01 par value; 150,000,000 shares authorized, 30,787,770 and 28,391,072 shares issued and outstanding as of June 30, 2016 and December 31, 2015, respectively	307,878	283,911
Additional paid-in capital	70,715,564	67,754,383
Accumulated deficit	(68,794,523)	(60,601,778)
Total stockholders' equity	2,230,985	7,438,764
Total liabilities and stockholders' equity	\$ 10,940,488	\$ 12,397,127

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,	
	2016	2015	2016	2015
Revenues:				
Grants	\$ —	\$ 136,616	\$ 148,054	\$ 376,156
Total revenues	<u>—</u>	<u>136,616</u>	<u>148,054</u>	<u>376,156</u>
Operating costs and expenses:				
Research and development	1,596,002	2,325,637	3,296,514	4,051,530
General and administrative	1,929,166	4,206,512	4,581,005	5,187,101
Total operating costs and expenses	<u>3,525,168</u>	<u>6,532,149</u>	<u>7,877,519</u>	<u>9,238,631</u>
Loss from operations	(3,525,168)	(6,395,533)	(7,729,465)	(8,862,475)
Interest and other income (expense)	(262,807)	—	(463,280)	(184)
Change in fair value of warrant liability	—	—	—	19,807
Net loss	<u>\$ (3,787,975)</u>	<u>\$ (6,395,533)</u>	<u>\$ (8,192,745)</u>	<u>\$ (8,842,852)</u>
Deemed dividend on Series A-1 preferred stock	—	—	—	(9,017,512)
Deemed dividend on Series A-1 warrant	—	—	—	(179,411)
Deemed dividend on Series B preferred stock	—	—	—	(8,655,998)
Accretion of preferred stock dividends	—	—	—	(93,234)
Net loss allocable to common stockholders	<u>\$ (3,787,975)</u>	<u>\$ (6,395,533)</u>	<u>\$ (8,192,745)</u>	<u>\$ (26,789,007)</u>
Basic and diluted net loss per share	<u>\$ (0.12)</u>	<u>\$ (0.29)</u>	<u>\$ (0.27)</u>	<u>\$ (2.14)</u>
Shares used to calculate basic and diluted net loss per share	30,551,765	21,695,404	29,879,975	12,529,921

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, 2016
(Unaudited)

	Series D and E Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>			
Balance at December 31, 2015	224,823	\$ 2,248	28,391,072	\$ 283,911	\$ 67,754,383	\$(60,601,778)	\$ 7,438,764
Conversion of Series D Preferred Stock to common stock	(18,202)	(182)	1,820,200	18,202	(18,020)	—	—
Issuance of warrants in connection with note payable transaction on January 15, 2016	—	—	—	—	607,338	—	607,338
Stock issued for services	—	—	100,000	1,000	63,000	—	64,000
Stock issued upon vesting of restricted stock units on April 2, 2016, net of payroll taxes	—	—	476,498	4,765	(182,588)	—	(177,823)
Stock-based compensation	—	—	—	—	2,491,451	—	2,491,451
Net loss	—	—	—	—	—	(8,192,745)	(8,192,745)
Balance at June 30, 2016	<u>206,621</u>	<u>\$ 2,066</u>	<u>30,787,770</u>	<u>\$ 307,878</u>	<u>\$ 70,715,564</u>	<u>\$(68,794,523)</u>	<u>\$ 2,230,985</u>

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,	
	2016	2015
Operating activities		
Net loss	\$ (8,192,745)	\$ (8,842,852)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	32,466	9,799
Stock-based compensation	2,491,451	1,471,780
Change in fair value of warrants	—	(19,807)
Issuance of restricted common stock for services	64,000	1,958,450
Debt discount amortization	223,352	—
Increase (decrease) in operating assets and liabilities:		
Grants receivable	757,562	(52,272)
Other receivables	—	(106,010)
Prepaid expenses and other	56,318	213,426
Accounts payable	(877,179)	(331,501)
Accrued clinical operations and site costs	100,116	(134,569)
Accrued compensation	(80,227)	220,857
Other accrued expenses	199,752	307,090
Net cash used in operating activities	<u>(5,225,134)</u>	<u>(5,305,609)</u>
Investing activities		
Purchases of property and equipment	(316,846)	(35,154)
Net cash used in investing activities	<u>(316,846)</u>	<u>(35,154)</u>
Financing activities		
Cash receipt from bank loan, net of financing costs	4,610,324	—
Issuances of common stock, net of issuance costs	—	11,046,348
Proceeds from exercise of stock options	—	800
Principal payments on capital lease	(2,555)	—
Purchase of vested employee stock in connection with tax withholding obligation	(177,823)	—
Net cash provided by financing activities	4,429,946	11,047,148
Net change in cash and cash equivalents	(1,112,034)	5,706,385
Cash and cash equivalents at beginning of period	4,084,085	1,477,143
Cash and cash equivalents at end of period	<u>\$ 2,972,051</u>	<u>\$ 7,183,528</u>
Supplemental disclosure:		
Cash paid during the period for income taxes	<u>\$ 14,546</u>	<u>\$ 1,600</u>
Supplemental disclosures of non-cash investing and financing information:		
Deemed dividend on beneficial conversion feature for preferred stock	<u>\$ —</u>	<u>\$ 17,852,921</u>
Capital lease in connection with purchase of equipment	<u>\$ 95,656</u>	<u>\$ —</u>
Accretion of redemption value for Series A-1, B and C-1 convertible preferred stock	<u>—</u>	<u>93,234</u>
Conversion of Series A-1 redeemable preferred stock into common stock	<u>\$ —</u>	<u>\$ 162,968</u>
Conversion of Series C preferred stock to common stock	<u>\$ —</u>	<u>\$ 966</u>
Conversion of Series B preferred stock to common stock	<u>\$ —</u>	<u>\$ 160,380</u>
Conversion of Series D preferred stock to common stock	<u>\$ —</u>	<u>\$ 400</u>
Exchange of Series A-1 preferred stock and warrants into common stock and Series D convertible preferred stock	<u>\$ —</u>	<u>\$ 13,111,280</u>
Exchange of Series B preferred stock and warrants into common stock and Series D convertible preferred stock	<u>\$ —</u>	<u>\$ 10,451,783</u>
Fair value of warrants issued	<u>\$ 607,338</u>	<u>\$ —</u>
Warrants exercised to purchase common stock on a cashless basis	<u>\$ —</u>	<u>\$ 12,198</u>

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 Therapeutics Holdings”) 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 (the “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 on a condensed consolidated financial statement basis with our wholly owned subsidiary following the Merger, MabVax Therapeutics, as applicable. Our common stock has been quoted on the OTCQB under the symbol “MBVX” since October 10, 2014.

The balance sheet data at December 31, 2015, has been derived from audited financial statements at that date. It does not include, however, all of the information and notes required by accounting principles generally accepted in the United States of America (“GAAP”) for complete financial statements.

The Company is a clinical stage biopharmaceutical company engaged in the discovery, development and commercialization of proprietary human monoclonal antibody products and vaccines for the treatment of a variety of cancers. The Company has discovered a pipeline of human monoclonal antibody products based on the protective immune responses generated by patients who have been immunized against targeted cancers. Therapeutic vaccines under development were discovered at Memorial Sloan Kettering Cancer Center (“MSK”) and are exclusively licensed to MabVax Therapeutics. The Company operates in only one business segment.

The Company has incurred net losses since inception and expects to incur substantial losses for the foreseeable future as it continues its research and development activities. To date, the Company has 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. The Company 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 for the year ended December 31, 2015, filed in our Annual Report on Form 10-K on March 14, 2016.

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 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.

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.

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 \$8,192,745, net cash used in operating activities of \$5,225,134, net cash used in investing activities of \$316,846, and net cash provided by financing activities of \$4,429,946 for the six months ended June 30, 2016. As of June 30, 2016, the Company had \$2,972,051 in cash and cash equivalents and an accumulated deficit of \$68,794,523.

On March 31, 2015 and April 10, 2015, we closed on a financing transaction by entering into separate subscription agreements with accredited investors relating to the issuance and sale of an aggregate of \$11,714,498 of units (the "Units") at a purchase price of \$0.75 per Unit, with each Unit consisting of one share of our common stock, par value \$0.01 per share (or, at the election of any investor who, as a result of receiving common stock would hold in excess of 4.99% of our issued and outstanding common stock, shares of our newly designated 0% Series E Convertible Preferred Stock) and a thirty-month warrant to purchase one half of one share of common stock at an initial exercise price of \$1.50 per share, as further described in the Notes to Financial Statements – Equity (the "April 2015 Private Placement").

The initial closing of the April 2015 Private Placement took place on March 31, 2015, in which the Company sold an aggregate of \$4,995,749 of Units. Following the initial closing the Company entered into separate reconfirmation agreements with the investors in order to extend the initial closing date, increase the offering amount, and adopt a lockup agreement, which was entered by all investors who elected to continue their investment. The second closing was completed on April 10, 2015 for an additional \$6,718,751 of Units. The Company issued \$2,500,000 of Units consisting of Series E Convertible Preferred Stock on April 10, 2015 and the remainder of Units issued in the April 2015 Private Placement were in the form of common stock Units. Of the total cash received in the second closing on April 10, 2015, \$3,500,000 was initially held in escrow under the terms of an escrow agreement with Signature Bank, N.A for a period of 10 weeks pending the approval of a representative of one of the lead investors to release the funds. On June 22, 2015, the Company, Signature Bank, N.A. and OPKO Health, Inc. (“OPKO”) extended the term of the escrow to 16 weeks from the closing of the April 2015 Private Placement. As further consideration for the amendment, on June 30, 2015, the Company and OPKO entered into a letter agreement pursuant to which the Company granted OPKO the right, but not the obligation, until June 30, 2016, to nominate and appoint up to two additional members of the Company’s board of directors (the “Board” or the “Board of Directors”), or to approve the person(s) nominated by the Company pursuant to the agreement in consideration for the release of the escrowed funds. The nominees will be subject to the satisfaction of standard corporate governance practices and any applicable national securities exchange requirements. Upon signing the agreement, the escrowed funds were released to the Company.

On October 5, 2015, we closed a public offering of 2,500,000 shares of common stock and warrants to purchase 1,250,000 shares of common stock, at an offering price of \$1.10 per share. For every two shares of common stock sold, the Company issued one warrant to purchase one share of common stock. The Company received \$2,750,000 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling approximately \$586,608, and without giving effect to exercise of the underwriters’ over-allotment option. The Company has been using the net proceeds from this offering to fund the HuMab-5B1 human antibody program through Phase I clinical development and for working capital and general corporate purposes.

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 \$1.32 per share. The warrants are not listed on any securities exchange or other trading market. The underwriters did not exercise a 30-day option to purchase up to an additional 375,000 shares of common stock and up to an additional 187,500 warrants at the same price to cover over-allotments, if any.

Under the terms of the underwriting agreement entered into between the Company and the underwriter in the public offering, the Company, without the prior written consent of the underwriter, was prohibited, for a period of 90 days after execution of the underwriting agreement, from issuing any equity securities, subject to certain exceptions.

On October 12, 2015, the Company and investors holding over 60% of the outstanding Registerable Securities (as such term is defined in the Registration Rights Agreements) issued in the April 2015 Private Placement entered into a third amendment agreement to the Registration Rights Agreements to suspend the Company’s registration obligations under the Registration Rights Agreements and related subscription agreements during any period when the “Standstill” provision set forth in the related subscription agreements is in effect. On January 28, 2016, we filed a registration statement with the SEC covering the resale of such registrable securities, which was declared effective by the SEC on February 10, 2016.

On January 15, 2016, the Company 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.

We anticipate that the Company will continue to incur net losses into the foreseeable future as we: (i) continue our Phase I clinical trial for our standalone therapeutic HuMab 5b-1, designated as MVT-5873 that was initiated in the first quarter of 2016; (ii) continue our PET imaging agent 89Zr-HuMab-5B1, designated as MVT-2163 that was initiated in July 2016; (iii) continue to conduct preclinical efforts on our HuMab-based radioimmunotherapy product and several other programs, and (iv) continue operations as a public company. After giving effect to the net proceeds received from the January 2016 Term Loan, management believes that the Company has sufficient funds to meet its obligations through September 2016. 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.

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, asset sales, government grants or other arrangements. However, we cannot be sure that such additional funds will be available on reasonable terms, or at all. If we are unable to secure adequate additional funding, we may be forced to make reductions in spending, 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 future prospects.

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

The Company considers 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

The Company's financial instruments consist of cash and cash equivalents, grants receivable, prepaid expenses and other current assets and accounts payable, all 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

MabVax Therapeutics Series B preferred stock and warrants (Pre-Merger MabVax Therapeutics Issuances)

Due to the anti-dilution protection in our Series B Warrants (described below), the Series B warrants were recorded as a current liability in the amount of \$92,463 on the Company's consolidated balance sheet as of December 31, 2014. On March 25, 2015, the Series B warrants were re-valued at \$72,656 prior to being exchanged into shares of common stock and Series D convertible preferred stock on a one for one basis and the warrant liability was eliminated and the Company recorded a gain of \$19,807 for the three months ended March 31, 2015.

Dividends on Preferred Stock

The Company immediately recognizes 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. The value adjustment made to the redemption value and preferred stock dividends for the three months ended March 31, 2015, was an increase of \$93,234.

No dividends were ever declared by the MabVax Therapeutics Board of Directors since MabVax Therapeutics' inception on either of the MabVax Therapeutics Series A redeemable convertible preferred stock or the MabVax Therapeutics Series B redeemable convertible preferred stock.

Conversion of Preferred Stock into Common Stock

During the six months ended June 30, 2015, holders of Series A-1, Series B, and Series C preferred stock converted 64,019, 106,437, and 96,571 shares into 38,456, 276,883, and 120,714 shares of common stock, respectively.

Exchange of Series A-1 and Series B Preferred Stock and Warrants into Common Stock and Series D Preferred Stock

On March 25, 2015, the Company entered into separate exchange agreements with 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 2,537,502 shares of the Company's common stock and an aggregate of 238,156 shares of the Company's newly designated Series D Convertible preferred stock (the "Series D preferred stock"), convertible into 23,815,600 shares of common stock. No cash was exchanged in the transaction. The Company recorded deemed dividends of \$9,017,512, \$8,655,998 and \$179,411 representing the excess fair value of the common stock issued over the original conversion terms of the Series A-1 and Series B preferred stock as part of the consideration for elimination of the Series A-1, Series B preferred stock and Series A-1 warrant, respectively.

No commission or other payment was received by the Company in connection with the exchange agreements.

Series D Preferred Stock

As of June 30, 2016, there were 173,288 shares of Series D preferred stock issued and outstanding that are convertible into an aggregate of 17,328,800 shares of common stock, as compared to 191,490 that were convertible into 19,149,000 shares of common stock as of December 31, 2015.

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 100 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.

As of March 25, 2015, pursuant to the terms of the exchange agreements, the Series A-1 Purchase Agreement, dated February 12, 2014; Series A-1 Registration Rights Agreement, dated February 12, 2014; the Series B Purchase Agreement, dated May 12, 2014; and the Series B Registration Rights Agreement, dated May 12, 2014; all of which have been described as part of the Company's annual report on Form 10-K, were terminated, and all rights covenants, agreements and obligations contained therein, are of no further force or effect.

Series E Preferred Stock

As of June 30, 2016 and December 31, 2015, there were 33,333 shares of Series E preferred stock issued and outstanding, convertible into 3,333,300 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 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 \$0.75 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 Preferred Stock Certificate of Designation, 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.

April 2015 Private Placement

On March 31, 2015, the Company consummated the first closing of the April 2015 Private Placement and sold \$4,714,726 of Units, net of \$281,023 in issuance costs, consisting of 6,661,000 shares of common stock and warrants to purchase 3,330,500 shares of common stock with an exercise price of \$1.50 a share. The Units were sold at a price of \$0.75 per Unit.

On April 10, 2015, the Company consummated the second and final closing of the April 2015 Private Placement and sold \$3,831,622 of Units, net of \$387,127 in issuance costs, of which \$2,500,000 of the Units consisted of Series E preferred stock and the balance of it consisting of 5,624,998 shares of common stock, together with warrants to all investors to purchase 4,479,167 shares of common stock at \$1.50 a share. Each Unit was sold at a purchase price of \$0.75 per Unit.

The Company paid commissions to broker-dealers in the aggregate amount of approximately \$574,000 in the April 2015 Private Placement.

OPKO was the lead investor in the April 2015 Private Placement, purchasing \$2,500,000 of Units consisting of Series E preferred stock.

As a condition to OPKO's and Frost Gama Investment Trust's, or FGIT's, participation in the April 2015 Private Placement, each of the other investors in the April 2015 Private Placement agreed to execute lockup agreements restricting the sale of 50% of the securities underlying the Units purchased by them for a period of six months and the remaining 50% prior to the expiration of one year following the final closing date of the April 2015 Private Placement.

On April 10, 2015, the Company agreed that \$3.5 million of the net proceeds of such closing would be paid into and held under the terms of an escrow agreement with Signature Bank, N.A. pending the approval of a representative of OPKO or 10 weeks thereafter, unless released sooner or extended by the Company and OPKO. On June 22, 2015, the Company and OPKO extended the termination date of the escrow to 16 weeks from the final closing of the April 2015 Private Placement. In connection with the OPKO investment, Steven Rubin, Esq. was appointed advisor to the Company. The escrowed funds were to be returned to the applicable investors and the Company shall have no further obligation to issue Units to such investors in the event certain release conditions are not met. On June 30, 2015, the Company and OPKO entered into a letter agreement pursuant to which the Company granted the representative the right, but not the obligation, until June 30, 2016, to nominate and appoint up to two additional members of the Company's Board, or to approve the person(s) nominated by the Company pursuant to the agreement in consideration for the release of the escrowed funds. The nominees will be subject to the satisfaction of standard corporate governance practices and any applicable national securities exchange requirements. Upon signing the agreement, the escrowed funds were released to the Company.

The warrants are exercisable upon issuance and expire 30 months thereafter and may be exercised for cash or on a cashless basis. The warrants have a per share exercise price of \$1.50, 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.

In connection with the April 2015 Private Placement, the Company also entered into a registration rights agreements (the "Registration Rights Agreements") with the investors in the April 2015 Private Placement pursuant to which the Company agreed to file a registration statement with the SEC covering the resale of 25% of common stock issued pursuant to the Subscription Agreements including 25% of the common stock issuable upon conversion of the Series E preferred stock, in the event the investors elect to receive Series E preferred stock instead of common stock (together, the "Registrable Securities"), no later than 60 days following the final closing date of the April 2015 Private Placement, and to use its commercially reasonable best efforts to have such registration statement declared effective within 120 days after filing. Investors in the Private Placement also may be required under certain circumstances to agree to refrain from selling securities underlying the Purchased Units. The liquidated damages for failure to achieve effectiveness of the Registrable Securities is 1% a month 120 days after filing, and provided management has not used commercially reasonable best efforts to have the registration statement declared effective within that time frame.

On June 9, 2015, the Company and investors holding over 60% of the outstanding Registrable Securities entered into an amendment agreement to the Registration Rights Agreements in order to extend the filing date of the registration statement to waive any payments that may be due to the investors as a result of the Company not filing a registration statement on or before the original filing date. On August 4, 2015, the Company and investors holding over 70% of the outstanding Registrable Securities entered into a second amendment agreement to further extend the filing date to October 9, 2015.

On October 12, 2015, the Company and investors holding over 60% of the outstanding Registerable Securities entered into a third amendment agreement to the Registration Rights Agreements to suspend the Company's registration obligations under the Registration Rights Agreements and related subscription agreements during any period when the "Standstill" provision set forth in the subscription agreements is in effect.

On January 28, 2016, the Company filed a Registration Statement on Form S-1, registering 3,904,830 shares of common stock for resale representing 3,071,500 shares of common stock and 833,333 shares of common stock, which are issuable upon conversion of the Company's Series E Convertible Preferred Stock issued in the April 2015 Private Placement.

Except for certain issuances, for a period beginning on the closing date of the April 2015 Private Placement and ending on the date that is the earlier of (i) 24 months from the final closing date of the April 2015 Private Placement, (ii) the date the Company consummates a financing (excluding proceeds from the April 2015 Private Placement) in which the Company receives gross proceeds of at least \$10,000,000 and (iii) the date the common stock is listed for trading on a national securities exchange (such period until the earlier date, the "Price Protection Period"), in the event that the Company issues any shares of common stock or securities convertible into common stock at a price per share or conversion price or exercise price per share that is less than \$0.75, the Company shall issue to the investors in the April 2015 Private Placement such additional number of shares of common stock such that the investor shall own an aggregate total number of shares of common stock as if they had purchased the Units at the price of the lower price issuance. No adjustment in the warrants is required in connection with a lower price issuance.

The Company has also granted each investor a right of participation in the Company's financings for a period of 24 months.

In the event the Company conducts certain private or public offerings of its securities, each investor has agreed, if requested by the underwriter or placement agent so engaged by the Company in connection with such offering, to refrain from selling any securities of the Company for a period of up to 60 days.

Between April 13, 2015, and April 14, 2015, certain holders of warrants issued in the April 2015 Private Placement to purchase an aggregate of 1,849,999 shares of common stock exercised such warrants on a cashless basis for an aggregate issuance of 1,219,780 shares of common stock. As of June 30, 2016, there were 5,959,668 warrants outstanding to purchase common stock at \$1.50 a share.

On October 5, 2015, the Company closed a public offering of 2,500,000 shares of common stock and warrants to purchase 1,250,000 shares of common stock, at an offering price of \$1.10 per share. For every two shares of common stock sold, the Company issued one warrant to purchase one share of common stock. The Company received \$2,750,000 in gross proceeds, before underwriting discounts and commissions and offering expenses totaling approximately \$586,608, and without giving effect to any exercise of the underwriters' over-allotment option. The Company has been using the net proceeds from this offering to fund the HuMab-5B1 human antibody program through Phase I clinical development and for working capital and general corporate purposes.

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 \$1.32 per share. The warrants are not listed on any securities exchange or other trading market. As of June 30, 2016, there were warrants to purchase 1,250,000 shares of common stock outstanding. The Company granted the underwriters a 30-day option to purchase up to an additional 375,000 shares of common stock and up to an additional 187,500 warrants at the same price to cover over-allotments, if any.

Under the terms of the underwriting agreement entered into between the Company and the underwriter in the public offering, the Company, without the prior written consent of the underwriter, was prohibited, for a period of 90 days after execution of the underwriting agreement, from issuing any equity securities, subject to certain exceptions.

Issuance of Common Stock under Common Stock Purchase Agreement

In connection with the Company's July 2014 financing, or the July 2014 Financing Transaction, the Company assumed certain obligations as per the original agreement to issue additional shares to investors in the July 2014 Financing Transaction if a subsequent financing was at a price per share lower than the price per share in the July 2014 Financing Transaction. The Company issued on March 31, 2015, an aggregate of 88,093 shares of common stock that were required to be issued in connection with the July 2014 Financing Transaction as a result of the lower share price in the Private Placement.

Grant of Restricted Shares

Rubin Grant

On April 3, 2015, the Company entered into a consulting agreement with Steve Rubin pursuant to which he agreed to provide advisory services in connection with corporate strategy, licensing and business development estimated to be for a period of 12 months. In exchange for his services, the Company provided him with a one-time grant of 200,000 shares of the Company's restricted common stock, valued at \$2.30 a share. 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 shares as consulting expense upon grant during the second quarter of 2015.

Ravetch Grant

On April 4, 2015, the Board approved the issuance of an additional restricted stock award of 131,500 shares to Jeffrey Ravetch. This award is for future services covering at least a one-year period. The award was granted in addition to the prior award to Dr. Ravetch on April 2, 2015 of: (i) 34,250 restricted shares and (ii) options to purchase 34,250 shares of common stock with an exercise price of \$2.30 per share, for a total grant of 200,000 restricted shares and options. As the 131,500 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 shares as consulting expense upon grant during the second quarter of 2015.

Livingston Grant

On April 4, 2015, the Board of Directors approved a restricted stock award by the Company of 1,000,000 shares of common stock, valued at \$2.30 a share, to be issued to Phil Livingston, Ph.D. for his continuing service to the Company. On May 13, 2015, the Compensation Committee of the Board clarified that the award was being granted in consideration for at least one year of Dr. Livingston's services. The committee further clarified that the vesting of the common stock shall be on the one-year anniversary of the Board of Directors' approval of the award, or April 4, 2016. The Company is expensing the grant date fair value of the award over the vesting period of one year.

Consulting Agreement

On April 5, 2015, the Company entered into a consulting agreement with The Del Mar Consulting Group, Inc. and Alex Partners, LLC, together, the "Investor Relations Consultants", pursuant to which such Investor Relations Consultants shall provide investor relations services to the Company in consideration for an immediate grant of 300,000 shares of the Company's restricted common stock and a monthly cash retainer of \$12,000 a month for ongoing services for a period of one year. The consultants also received an additional 200,000 shares of the Company's restricted common stock upon the Company's achieving a milestone based on its fully-diluted market capitalization. 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 300,000 shares or \$690,000, as investor relations expense upon grant during the second quarter of 2015. The performance condition for the 200,000 shares became probable and the market capitalization metric was met during the second quarter; therefore, the Company recognized an additional \$460,000 of expense during the quarter ended June 30, 2015.

Consultant Grants

During 2015, the Board of Directors approved the issuance of restricted stock awards to two consultants totaling 120,000 shares with vesting terms ranging from one to three years, valued from \$1.77 to \$2.13 per share. The Company is expensing each of the grant date fair value of the awards over the performance period for the award, which will be re-measured at the end of each quarter until the performance is complete. As of June 30, 2016, the Company expensed \$26,812 related to these grants. As of June 30, 2016, the expected future compensation expense related to these grants is \$39,188 based upon the Company's stock price on June 30, 2016.

On January 13, 2016, the Board of Directors approved the issuance of 100,000 shares of restricted stock valued at \$64,000 to a consultant for advisory services to the Company.

6. Notes Payable

On January 15, 2016, we entered into a loan and security agreement with Oxford Finance, LLC pursuant to which we are able to borrow \$10,000,000 in two equal tranches of \$5,000,000 each (the "Loan and Securities Agreement"). The first tranche of \$5,000,000 was funded at close on January 15, 2016 (the "Term A Loan"), and the second tranche of \$5,000,000 (the "Term B Loan") will be funded 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. The interest rate for each term 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 the 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. If the Term B Loan is drawn, then the interest only period is extended by 6 months, followed by a 30-month amortization of the principal amount of the loan. 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 1,666,668 common stock purchase warrants to Oxford Finance, LLC with an exercise price of \$0.75 per share. The warrants are exercisable for five years and may be exercised on a cashless basis. 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. The debt discount is being amortized as interest expense over the term of the loan using the effective interest method.

We granted Oxford Finance a perfected first priority lien on all of the Company's assets with a negative pledge on intellectual property. The Company paid Oxford Finance 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 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 balance sheet. Consistent with the early adoption of ASU 2015-3, 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.

In connection with the Loan Agreement, the Company issued to the Lenders warrants to purchase 1,666,668 shares of common stock at an exercise price of \$0.75 per share. We used the Black-Scholes valuation method to calculate the fair value of the warrants.

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.

The Company was in compliance with all applicable covenants set forth in the Loan Agreement as of June 30, 2016.

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The Company recorded interest expense related to the term loan of \$155,512 and \$284,441 for the three and six months ended June 30, 2016, 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, is 11.72%.

Future principal payments under the Loan Agreement as of June 30, 2016 are as follows:

Years ending December 31:

2016	\$	—
2017		1,527,777
2018		1,666,667
2019		1,666,667
2020		138,889
Notes payable, balance as of June 30, 2016		5,000,000
Unamortized discount on notes payable		(912,240)
Notes payable, net, balance as of June 30, 2016		4,087,760
Current portion of notes payable		(694,444)
Non-current portion of notes payable	\$	<u>3,393,316</u>

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, 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.

In April 2015, the Company granted a restricted stock award of 1,000,000 shares to Phil Livingston, Ph.D., an employee and Board member, for his continuing services to the Company, and the value of this award has been amortized over a period of one year.

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 158,073 to 8,360,789 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) 8,000,000 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) 229,000; and (iii) an amount determined by the Board;
- Provide that no more than 3,000,000 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.

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 values of the awards 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 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, 2016 we used volatility of 81.98% to 83.75%, dividend rate of 0%, expected term of 6 years, and risk-free interest rate of 1.23% to 1.43% in our Black-Scholes calculations. For the three and six months ended June 30, 2015, we used volatility of 86.62%, dividend rate of 0%, expected term of 6 years, and risk-free interest rate of 0.87% in our Black-Scholes calculations.

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

	Three Months Ended June 30, 2016	Three Months Ended June 30, 2015	Six Months Ended June 30, 2016	Six Months Ended June 30, 2015
Research and development	\$ 284,057	\$ 284,125	\$ 587,681	\$ 325,701
General and administrative	673,506	1,104,883	1,903,770	1,146,079
Total stock-based compensation expense	\$ 957,563	\$ 1,389,008	\$ 2,491,451	\$ 1,471,780

Stock-based Award Activity

The following table summarizes the Company's stock option activity during the six months ended June 30, 2016:

	<u>Options Outstanding</u>	<u>Weighted- Average Exercise Price</u>
Outstanding at December 31, 2015	3,243,041	\$ 2.36
Granted	1,655,500	0.73
Exercised	—	—
Forfeited/cancelled/expired	(219,449)	2.30
Outstanding and expected to vest at June 30, 2016	4,679,092	\$ 1.90
Vested and exercisable at June 30, 2016	1,005,213	\$ 2.54

The total unrecognized compensation cost related to nonvested stock option grants as of June 30, 2016, was \$3,331,388, and the weighted average period over which these grants are expected to vest is 2.08 years. The Company has assumed a forfeiture rate of zero. The weighted average remaining contractual life of stock options outstanding at June 30, 2016, is 9.0 years.

During the first six months of 2016, the Company granted 1,655,500 options to officers and employees with a weighted average exercise price of \$0.73 and vesting over a three-year period with vesting starting at the one-year anniversary of the grant date. During the first six months of 2015, there were 2,615,850 options and 2,180,850 shares of restricted stock granted to directors, officers, employees and consultants.

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Because the Company had a net operating loss carryforward as of June 30, 2016, 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, there were no stock options exercised in the three and six months ended June 30, 2016 and there were 2,779 stock options exercised during the three and six months ended June 30, 2015.

A summary of activity related to restricted stock grants under the Plan for the six months ended June 30, 2016 is presented below:

	Shares	Weighted- Average Grant- Date Fair Value
Nonvested at December 31, 2015	2,300,850	\$ 2.28
Granted	—	—
Vested	(726,952)	2.30
Forfeited	—	—
Nonvested at June 30, 2015	<u>1,573,898</u>	\$ 2.28

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

Management Bonus Plan

On April 2, 2015, the Compensation Committee of the Board of the Directors approved the 2015 Management Bonus Plan (the "Management Plan") outlining maximum target bonuses of the base salaries of certain of the Company's executive officers. Under the terms of the Management Plan, the Company's Chief Executive Officer shall receive a maximum target bonus of up to 50% of his annual base salary, the Chief Financial Officer shall receive a maximum target bonus of up to 35% of his annual base salary and the Company's Vice President shall receive a maximum target bonus of up to 25% of his annual base salary.

On April 4, 2015, the Board approved the following Non-Employee Director Policy (the "Incumbent Director Policy") with respect to incumbent non-employee members of the Board in the event that they are replaced before their term expires:

- A one-time issuance of 20,000 restricted shares of common stock;
- The vesting of all options and restricted stock grants held on such date; and
- The payment of all earned but unpaid cash compensation for their services on the Board and its committees, as of such date.

On April 4, 2015, in connection with his resignation from the Board, Michael Wick received a one-time restricted stock grant of 20,000 shares under the Incumbent Director Policy.

On February 16, 2016, our Compensation Committee approved a 2016 Management Bonus Plan outlining maximum target bonuses of the base salaries of certain of our executive officers. Under the terms of the 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.

Stock Issued Upon Vesting of Restricted Stock Grants

On April 2 and April 3, 2016, 726,954 shares of restricted stock units vested upon the one-year anniversary of restricted stock units granted. Accordingly, 476,498 shares were issued to the Company's directors and officers, and the Company withheld 250,456 shares for the employee portion of taxes and remitted \$177,823 to the tax authorities in order to satisfy tax liabilities related to this issuance on behalf of the officers. As of June 30, 2016, there were 1,573,898 nonvested restricted stock units remaining outstanding.

Common Stock Reserved for Future Issuance

Common stock reserved for future issuance consists of the following at June 30, 2016:

Common stock reserved for conversion of preferred stock	20,662,100
Common stock reserved for exercise of warrants	8,876,336
Common stock options outstanding	4,679,092
Authorized for future grant or issuance under the Stock Plan	1,521,038
Nonvested restricted stock	1,573,898
Total	<u>37,312,464</u>

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,	
	2016	2015
Stock options	4,679,092	2,843,041
Restricted stock awards	1,573,898	2,180,850
Preferred stock	20,662,200	23,148,000
Common stock warrants	8,876,336	5,959,668
Total	<u>35,791,526</u>	<u>34,131,559</u>

10. Contracts and Agreements

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 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. The Company paid \$225,000 during 2015 related to this contract.

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 will supply additional research materials as requested by the university, which is evaluating ways to optimize the function.

Juno Option Agreement

On August 29, 2014, MabVax Therapeutics entered into an Option Agreement (the “Option Agreement”) with Juno Therapeutics, Inc. (“Juno”) in exchange for a one-time up-front option fee in the low five figures. Pursuant to the Option Agreement, MabVax Therapeutics granted Juno the option to obtain an exclusive, world-wide, royalty-bearing license authorizing Juno to develop, make, have made, use, import, have imported, sell, have sold, offer for sale and otherwise exploit certain patents MabVax Therapeutics developed with respect to fully human antibodies with binding specificity against human GD2 or sialyl-Lewis A antigens and certain MabVax Therapeutics controlled biologic materials. As of June 30, 2016, the Option Agreement expired and Juno no longer has a contractual right for use of MabVax binding domains for use in the construction of CAR T-cells. During the three and six months ended June 30, 2016, no revenues had been earned under the Option 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, 2016, the Company had no additional expenses associated with the agreement. The company recorded no expenses related to this agreement in 2016. For the three and six months ended June 30, 2015, the Company recorded \$447,000 and \$1,235,000 of expense, respectively, 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 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 was intended to support a major portion of the preclinical work being conducted by the Company, together with its collaboration partner, MSKCC, to develop a novel Positron Emission Tomography (“PET”) imaging agent for detection and assessment of pancreatic cancer. The total contract amount for Phase I and Phase II of approximately \$1,749,000 supports research work through June 2016. The contract has been successfully completed at the end of 2015. No additional activities are required or planned under the contract and all monies available under the contract have been requested and received.

The Company records revenue associated with the NCI PET Imaging Agent Grant as the related costs and expenses are incurred. For the three and six months ended June 30, 2016 and 2015, the Company recorded none, \$148,054, \$136,616 and \$376,156 of revenue associated with the NCI PET Imaging Agent Grant, respectively.

11. Commitments and contingencies

Litigation

On September 18, 2015, an Order and Final Judgment was entered by the Superior Court of the State of California, approving a settlement of a class action lawsuit commenced on May 30, 2014, in Santa Clara County Superior Court, State of California, on behalf of Cadillac Partners and others similarly situated, naming as defendants, MabVax Therapeutics, the Company and the Company's directors, Hudson Bay Capital Management LP, Bio IP Ventures LLC, Hudson Bay Master Fund Ltd., and Hudson Bay IP Opportunities Master Fund LP, together the "Parties," alleging the defendants breached certain fiduciary duties, or aided and abetted a breach of fiduciary duties, in connection with the Company's Merger with MabVax Therapeutics. The plaintiff sought to enjoin the Merger and obtain damages as well as attorneys' and expert fees and costs. We expect to incur no expenses in 2016 or thereafter in connection with this lawsuit or settlement.

Operating Leases

In connection with the Merger, the Company recorded a \$590,504 contingent lease termination fee, in connection with the termination by MabVax Therapeutics Holdings (f.k.a. Telik, Inc.) of the master lease and sublease of the Porter Drive Facility, which is payable to ARE-San Francisco No. 24 ("ARE"), if the Company receives \$15 million or more in additional financing in the aggregate, but otherwise forgiven.

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"). Due to the fact that 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.

The Company previously leased its corporate office and laboratory space under an operating lease that, as amended on August 1, 2010, expired on July 31, 2015. The lease contained an option to cancel at various dates prior to the termination date by paying a cancellation penalty. The Company has provided a refundable security deposit of \$11,017 to secure its obligations under the lease, which was included in other long-term assets in the accompanying condensed consolidated financial statements. We recognize rent expense on a straight-line basis over the term the lease. Rent expense of \$122,236 and \$115,118 was recognized in the years ended December 31, 2015 and 2014, respectively.

During the three and six months ended June 30, 2016, the Company recorded rent expense of \$115,238, \$202,921, respectively, and the three and six months ended June 30, 2015 the Company recorded rent expense of \$28,780, and \$57,559, respectively.

Minimum future annual operating lease obligations are as follows as of June 30, 2016:

2016 (remaining)	\$ 213,786
2017	439,330
2018	452,510
2019	466,085
2020	480,068
Thereafter	535,776
Total	<u>\$ 2,587,555</u>

Capitalized Leases

On March 21, 2016, the Company entered into a lease agreement with ThermoFisher Scientific (“Lessor”). Under the terms of the agreement, MabVax 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.

As of June 30, 2016, future minimum lease payments due in fiscal years under capitalized leases are as follows:

2016 (remainder of)	\$	11,653
2017		23,306
2018		23,306
2019		23,306
2020		23,306
2021 and thereafter		7,904
Less interest		<u>(19,679)</u>
Principal		93,102
Less current portion		<u>(16,303)</u>
Noncurrent portion	\$	<u><u>76,799</u></u>

12. Subsequent Events

Series D Conversions

Between July 1, 2016, and July 13, 2016, holders of Series D Preferred Stock converted 5,000 shares of Series D Preferred Stock into 500,000 shares of common stock.

Vesting of Restricted Stock Grants

On July 13, 2016, the Company issued 20,000 shares to an outside consultant of the Company upon the one-year anniversary of restricted stock units granted.

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 a number of 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, 2015, 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, development and commercialization of proprietary human monoclonal antibody products and vaccines 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 immunized 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 net losses since inception, and we expect to incur 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 products 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.

During the six months ended June 30, 2016, our loss from operations was \$7,729,465 and our net loss was \$8,192,745. Net cash used in operating activities for the six months ended June 31, 2016 was \$5,225,134 and cash and cash equivalents as of June 30, 2016 were \$2,972,051. As of June 30, 2016, we had an accumulated deficit of \$68,794,523.

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.

Clinical Product Development – Recent Updates

Phase I Clinical Trial of MVT-5873 (HuMab-5B1) – In March 2016, we announced the initiation of a phase I clinical trial of MVT-5873 for patients with locally advanced or metastatic adenocarcinoma of the pancreas (“PDAC”) or other CA19-9 positive malignancies. The CA19-9 target is expressed on more than 90% of pancreatic cancers and is a validated biomarker for the disease. The Company filed an Investigational New Drug (“IND”) application for this product on November 30, 2015, and received U.S. Food and Drug Administration (“FDA”) authorization to proceed with the study on December 24, 2015. The study is a phase I, open-label, multi-center, dose-escalation clinical trial. The primary objectives are to determine the safety, maximum tolerated dose (“MTD”), and the pharmacokinetics (“PK”) of MVT-5873. The phase I trial will also evaluate the tumor response rate based on RECIST 1.1 guidelines for standard tumor measurement and the duration of response of MVT-5873 as a single agent or in combination with a standard of care chemotherapy regimen. The study will enroll up to approximately 60 patients at multiple centers in the United States. In the dose escalation portion of the trial, patients enrolled have locally advanced or metastatic pancreatic cancer who have failed other therapies. Nine patients treated to date have been observed as tolerating initial dosages of the drug reasonably well. Infusion reactions, which are not uncommon with protein drugs, have been the most frequent adverse events related to drug exposure and have been addressed by slowing the infusion rate. Of the nine patients who have been dosed to date, five have been treated for three or more months and investigator observations have noted stable disease for a subset of those patients. We are continuing to escalate the drug dose to assess safety and reach an MTD and anticipate initiating the second portion of the trial where our drug is dosed in combination with chemotherapy in the fourth quarter of this year. We expect to have the preliminary results of this clinical trial later in the third quarter in 2016, with full results expected in 2017.

Phase I Clinical Trial of MVT-2163 ([89Zr]-HuMab-5B1) – In July 2016, we announced the initiation of a phase I clinical trial of MVT-2163 as a new generation PET imaging agent in patients with pancreatic cancer. MVT-2163 combines a well-established PET imaging radio-label [Zr-89] with the targeting specificity of the HuMab-5B1 antibody. Preclinical xenograft animal models demonstrated high image resolution of tumors, making MVT-2163 attractive as a potential diagnostic agent for use with the MVT-5873 therapeutic product. This second Phase I trial will evaluate the safety, pharmacokinetics and biodistribution of MVT-2163 in cancer patients. The trial results are also intended to determine the ideal dose and conditions for an optimal PET scan image using the new imaging agent. The first patient in the trial was dosed with MVT-2163 in early July and received PET scans on days 1, 2, 4, and 7. Investigator observations showed scans potentially highlighting smaller metastatic sites not seen on standard CT scans. These results are preliminary and require more patients to confirm. We expect to have the preliminary results of this clinical trial later in the third quarter 2016, with full results expected in 2017.

Vaccine Trials – Our lead cancer vaccine candidates targeting recurrent sarcoma (soft tissue cancer) and ovarian cancer are currently in proof of concept Phase II multi-center clinical trials. Both the sarcoma and ovarian cancer vaccine trials are randomized, double-blind, multicenter phase II trials that have enrolled 136 and 164 patients, respectively. Both trials are designed to yield statistically significant evidence that vaccination of trial subjects can provide 50% improvement in progression free survival, or PFS, and extend overall survival, or OS. Both studies are fully enrolled and all trial subjects have received all vaccinations.

An independent Drug Safety Monitoring Board, or DSMB, composed of experts in the field analyzed the sarcoma clinical trial data in March of 2013 and determined that the PFS endpoint of a 50% increase in the time to progression was not reached. However, the DSMB suggested that we continue to monitor patients to assess OS. We continue to monitor patients and expect the OS endpoint will be available late 2016 or early 2017. If the OS endpoint is achieved, we will pursue out-licensing the product. We currently do not plan to engage in additional clinical studies for this vaccine. We received a National Institutes of Health, or NIH, grant of \$1.8 million to help offset the clinical trial costs for the sarcoma trial. We have funded the remainder of the approximately \$6 million cost of the trial.

At the American Society of Clinical Oncology meeting in June 2016, the sponsors of the Phase II trial in ovarian cancer, the Gynecologic Oncology Group (“GOG”), a consortium of clinical trial investigators and sites working in collaboration with the National Cancer Institute, or NCI, reported that the primary endpoint of improvement in PFS was not reached. We have suggested that the GOG continue to monitor the trial subjects in the ovarian cancer vaccine trial for OS. The ovarian vaccine trial has been fully funded by a grant from the NIH. We have no financial obligation for this trial or the follow-on monitoring. If the OS endpoint is achieved, we will pursue out-licensing the product. We currently do not plan to engage in additional clinical studies for this vaccine.

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, 2016 and 2015

Revenues:

	Three Months Ended		% Increase/ (Decrease)	Six Months Ended		% Increase/ (Decrease)
	June 30,			June 30,		
	2016	2015		2016	2015	
Revenues	\$ —	\$ 136,616	(100%)	\$ 148,054	\$ 376,156	(61%)

For the three months ended June 30, 2016, we recognized no revenues, as compared to \$136,616 for the same period in the prior year. This decrease was primarily due to the completion of the current Phase of the NIH Imaging Contract during the first quarter of the current year.

For the six months ended June 30, 2016, we recognized revenues of \$148,054, as compared to \$376,156 for the same period in the prior year. This decrease was primarily due to the completion of the current Phase of the NIH Imaging Contract during the first quarter of the current year.

Research and development expenses:

	Three Months Ended		% Increase/ (Decrease)	Six Months Ended		% Increase/ (Decrease)
	June 30,			June 30,		
	2016	2015		2016	2015	
Research and development	\$ 1,596,002	\$ 2,325,637	(31%)	\$ 3,296,514	\$ 4,051,530	(19%)

For the three months ended June 30, 2016, we incurred research and development expenses of \$1,596,002, as compared to \$2,325,637 for the same period a year ago. Expenses for the current quarter in 2016 were primarily for clinical development of HuMab 5B1 both as a therapeutic and as a diagnostic, and in-house staffing to support preclinical and clinical development efforts in support of our programs. Expenses in the same period a year ago were primarily for GMP manufacturing development of our lead antibody candidate HuMab 5B1 at Patheon (f.k.a. Gallus BioPharmaceuticals).

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Stock-based compensation expense included in research and development expenses for the three months ended June 30, 2016 and 2015 was \$284,057 and \$284,125, respectively.

For the six months ended June 30, 2016, we incurred research and development expenses of \$3,296,514, as compared to \$4,051,530 for the same period a year ago. Expenses for the first six months in 2016 were primarily for clinical development of HuMab 5B1 both as a therapeutic and as a diagnostic, and in-house staffing to support preclinical and clinical development efforts in support of our programs. Expenses in the same period a year ago were primarily for GMP manufacturing development of our lead antibody candidate HuMab 5B1 at Patheon (f.k.a. Gallus BioPharmaceuticals).

Stock-based compensation expense included in research and development expenses for the six months ended June 30, 2016 and 2015 was \$587,681 and \$325,701, respectively.

General and administrative expenses:

	Three Months Ended June 30,		% Increase/ (Decrease)	Six Months Ended June 30,		% Increase/ (Decrease)
	2016	2015		2016	2015	
General and administrative	\$ 1,929,166	\$ 4,206,512	(54%)	\$ 4,581,005	\$ 5,187,101	(12%)

For the three months ended June 30, 2016, we incurred general and administrative expenses of \$1,929,166, as compared to \$4,206,512 for the same period a year ago. The decrease in general and administrative expenses was primarily due to lower stock-based compensation expenses of \$431,377, lower investor relations expenses of \$1,204,323 primarily related to stock issued for services in the same period last year, as well as lower consulting and business development expenses of \$1,383,959 related to stock issued for services in the same period last year. These decreases were partially offset by increased facility costs, professional fees related to consulting services, and increased headcount related to business development.

Stock-based compensation expense included in general and administrative expenses for the three months ended June 30, 2016 and 2015 was \$673,506 and \$1,104,883, respectively. Stock-based compensation expense for the three months ended June 30, 2016 included \$18,904 in restricted stock for services.

For the six months ended June 30, 2016, we incurred general and administrative expenses of \$4,581,005, as compared to \$5,187,101 for the same period a year ago. The decrease in general and administrative expenses was primarily due to lower stock-based compensation expenses of \$757,691, lower investor relations expenses of \$1,225,618 primarily related to stock issued for services in the same period last year, as well as lower consulting and business development expenses of \$763,124 related to stock issued for services in the same period last year. These decreases were partially offset by increased facility costs, professional fees related to consulting services, and increased headcount related to business development.

Stock-based compensation expense included in general and administrative expenses for the six months ended June 30, 2016 and 2015 was \$1,903,770 and \$1,146,079, respectively. Stock-based compensation expense for the six months ended June 30, 2016 included \$592,329 in restricted stock for services.

Interest income and other income (expense):

	Three Months Ended June 30,		% Increase/ (Decrease)	Six Months Ended June 30,		% Increase/ (Decrease)
	2016	2015		2016	2015	
Interest and other income (expense), net	\$ (262,807)	\$ —	* %	\$ (463,280)	\$ —	* %

*Negligible

Interest and other income and expense, net was (\$262,807) and none for the quarters ended June 30, 2016 and 2015, respectively. 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, \$47,584 of financing cost amortization, and \$59,738 of warrant amortization partially offset by interest income of \$6.

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. In addition, 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 condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these condensed 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 condensed 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 the Company incurs 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 the Company incurs internal expenses that are related to the approved grant.

Any amounts received by the Company 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 a number of 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.

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, 2016, MabVax Therapeutics 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 2015 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, 2016, we had an accumulated deficit of \$68,794,523. We expect to continue to incur increased expenses, resulting in losses, over at least the next several years due to, among other factors, our continuing and planned clinical trials and anticipated research and development activities. We had cash and cash equivalents of \$2,972,051 as of June 30, 2016.

	June 30, 2016	December 31, 2015
Cash and cash equivalents	\$ 2,972,051	\$ 4,084,085
Working capital (deficit)	\$ (1,871,206)	\$ 350,621
Current ratio	0.63:1	1.07:1

	Six Months Ended June 30,	
	2016	2015
Cash provided by (used in):		
Operating activities	\$ (5,225,134)	\$ (5,305,609)
Investing activities	\$ (316,846)	\$ (35,154)
Financing activities	\$ 4,429,946	\$ 11,047,148

Sources and Uses of Net Cash for the Six Months Ended June 30, 2016

Net cash used in operating activities was \$5,225,134 for the six-month period ended June 30, 2016, compared to \$5,305,609 in the comparable period in 2015. 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, 2016 was also impacted by a decrease of \$877,179 in accounts payable related primarily to research contract services and a \$757,562 decrease in grants receivable.

The net cash used in investing activities for the six-month periods ended June 30, 2016 and 2015, amounted to \$316,846 and \$35,154, respectively, primarily as a result of purchase of lab equipment in the corresponding periods.

Net cash provided by financing activities was \$4,429,946 for the six months ended June 30, 2016, compared to \$11,047,148 in the comparable period in 2015. Net cash provided by financing activities for the six months ended June 30, 2016 was attributable to the net proceeds from the term loan initiated during the first quarter of 2016. Net cash provided by financing activities for the six months ended June 30, 2015 was attributable to the net proceeds from the sale of common stock and warrants in a private placement completed in April 2015.

Future Contractual Obligations

The Company had rental payment obligations under an operating lease that expired on July 31, 2015 related to its facility at 11588 Sorrento Valley Road. The Company continued to occupy those premises until February 4, 2016, and continued the lease on a month-to-month basis.

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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 Suite 400, 11535 Sorrento Valley Rd., San Diego, California, to serve as the Company’s corporate offices and laboratories (the “New Premises”). Due to the fact that 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 4, 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 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.

Our master lease and sublease of our facility located at 3165 Porter Drive in Palo Alto, California (the “Porter Drive Facility”) were terminated on February 28, 2013 and we entered into a termination agreement with the landlord on February 19, 2013 to voluntarily surrender its premises. As a result 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 the landlord, but will otherwise be forgiven.

We anticipate that we will continue to incur substantial net losses into the foreseeable future as we: (i) continue our Phase I clinical trial for our stand-alone therapeutic HuMab 5b-1, or MVT-5873, which was initiated in the first quarter of 2016, (ii) initiate our Phase I clinical trial of our PET imaging agent 89Zr-HuMab-5B1, or MVT-2163, (iii) continue to conduct preclinical development activities related to other product development candidates in our library, and (iv) monitor patients in clinical trials that have already completed their treatment regimens. Based on management’s assumptions for continuing to develop its existing pipeline of products without additional funding, we expect we will have sufficient funds to meet our obligations through September 2016.

We plan to continue to fund our research and development and operating activities through public or private equity financings, debt financings, strategic partnerships or other arrangements with organizations that have capabilities and/or products that are complementary to our own capabilities and/or products, licensing arrangements, government grants, or other arrangements. However, we cannot be sure that such additional funds will be available on reasonable terms, or at all. If we are unable to secure adequate additional funding, we may be forced to reduce spending, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. In addition, if we do not meet our payment obligations to third parties as they come due, we 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 our management. Any of these actions could materially harm our business, results of operations, and future prospects.

If we raise additional funds by issuing equity securities, substantial dilution to our existing stockholders would result. If we raise 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 our ability to operate our business.

Recent Accounting Pronouncements

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 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.

Not applicable.

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, 2016.

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, 2016.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

On September 18, 2015, an Order and Final Judgment was entered by the Superior Court of the State of California, approving a settlement of a class action lawsuit commenced on May 30, 2014, in Santa Clara County Superior Court, State of California, on behalf of Cadillac Partners and others similarly situated, naming as defendants, MabVax Therapeutics, the Company and the Company's directors, Hudson Bay Capital Management LP, Bio IP Ventures LLC, Hudson Bay Master Fund Ltd., and Hudson Bay IP Opportunities Master Fund LP, together the "Parties", alleging the defendants breached certain fiduciary duties, or aided and abetted a breach of fiduciary duties, in connection with the Company's Merger with MabVax Therapeutics. The plaintiff sought to enjoin the Merger and obtain damages as well as attorneys' and expert fees and costs. We expect to incur no expenses in 2016 or thereafter in connection with this lawsuit or settlement.

Item 1A. Risk Factors.

RISK FACTORS

The terms of our secured debt facility require us to meet certain operating and financial covenants and place restrictions on our operating and financial flexibility. If we raise additional capital through debt financing, the terms of any new debt could further restrict our ability to operate our business.

Effective in January 2016, we entered into a \$10 million loan and security agreement with Oxford Finance that is secured by a lien covering substantially all of our assets, excluding intellectual property. As of June 30, 2016, we had an outstanding principal balance of \$5 million. The loan and security agreement contains customary affirmative and negative covenants and events of default. The affirmative covenants include, among others, covenants requiring us to maintain our legal existence and governmental approvals, deliver certain financial reports and maintain insurance coverage. The negative covenants include, among others, restrictions on transferring collateral, changing our business, incurring additional indebtedness, engaging in mergers or acquisitions, paying dividends or making other distributions, making investments and creating other liens on our assets, in each case subject to customary exceptions. If we default under the loan agreement, the lenders may accelerate all of our repayment obligations and take control of our pledged assets, potentially requiring us to renegotiate our agreement on terms less favorable to us or to immediately cease operations. Further, if we are liquidated, the lender's right to repayment would be senior to the rights of the holders of our common stock and preferred stock to receive any proceeds from the liquidation. The lenders could declare a default upon the occurrence of any event that they interpret as a material adverse change as defined under the loan agreement, thereby requiring us to repay the loan immediately or to attempt to reverse the declaration of default through negotiation or litigation. Any declaration by the lenders of an event of default could significantly harm our business and prospects and could cause the price of our common stock to decline. If we raise any additional debt financing, the terms of such additional debt could further restrict our operating and financial flexibility.

We are substantially dependent on the success of our product candidates, MVT-5873 and MVT-2163, and we cannot provide any assurance that any of our product candidates will be commercialized.

To date, our main focus and the investment of a significant portion of our efforts and financial resources has been in the development of our product candidates, MVT-5873 and MVT-2163, which are in early stages of development. Our future success depends heavily on our ability to successfully manufacture, develop, obtain regulatory approval, and commercialize these product candidates, which may never occur. Before commercializing either product candidate, we will require additional clinical trials and regulatory approvals for which there can be no guarantee that we will be successful. We currently generate no revenues from our product candidates, and we may never be able to develop or commercialize a marketable drug.

Our ability to generate product revenues will be diminished if our therapies sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our therapies, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from private health maintenance organizations and health insurers and other healthcare payers. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers are challenging the prices charged for medical products and services. Cost control initiatives could decrease the price that we would receive for any products in the future, which would limit our revenue and profitability. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs and therapeutics. We might need to conduct post-marketing studies in order to demonstrate the cost-effectiveness of any future products to such payers' satisfaction. Such studies might require us to commit a significant amount of management time and financial and other resources. Our future products might not ultimately be considered cost-effective. Even if one of our product candidates is approved by the FDA, insurance coverage may not be available, and reimbursement levels may be inadequate, to cover such therapies. If government and other healthcare payers do not provide adequate coverage and reimbursement levels for one of our products, once approved, market acceptance of such product could be reduced.

Our internal computer systems, or those of our third-party service providers, licensees, licensors, collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption in our business and operations.

Despite the implementation of security measures, our internal computer systems and those of our current and future service providers, licensees, licensors, collaborators and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we are not aware of any such material system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations. For example, the loss of clinical trial data from completed, on-going or future clinical trials could result in delays in our regulatory approval efforts and significant costs to recover or reproduce the data. Likewise, we rely on third parties to manufacture our drug candidates and conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development and commercialization of our product candidates could be delayed.

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, 2015.

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

Series D Conversions

In April 2016, a holder of Series D preferred stock converted 10,000 shares of Series D preferred stock into 1,000,000 shares of common stock.

The securities referenced above were issued in reliance on the exemption from registration afforded 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.

None.

Item 6. Exhibits.

EXHIBIT INDEX

Exhibits

Exhibit No.	Description
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

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 11, 2016

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)

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 11, 2016

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

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 11, 2016

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

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, 2016, 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 11, 2016

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

Date: August 11, 2016

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.