AmpliPhi Biosciences Corp
Form 424B3
August 15, 2016

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-203454

Prospectus Supplement No. 3

(to Prospectus dated May 14, 2015)

This Prospectus Supplement No. 3 supplements and amends the prospectus dated May 14, 2015, relating to the offering and resale by the selling stockholders identified in the prospectus of up to 3,051,090 shares of our common stock, par value $0.01. These shares consist of 1,575,758 shares of our common stock, which were issued pursuant to a subscription agreement, dated as of March 10, 2015, entered into by us and the selling stockholders listed in this prospectus, and 488,484 shares of our common stock underlying warrants, 393,939 of which are underlying warrants that were issued pursuant to the subscription agreement and 94,545 of which are underlying warrants that were issued to the placement agents in connection with the completion of the March 2015 private placement, as well as 480,000 shares previously issued to certain selling stockholders in March 2013 and 506,848 shares previously issued to certain selling stockholders in connection with our acquisition of Special Phage Holdings Pty Ltd in November 2012. All share numbers above reflect an adjustment for our 1-for-50 reverse stock split effected on August 3, 2015.

This prospectus supplement incorporates into our prospectus the information contained in our attached Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, filed with the Securities and Exchange Commission on August 15, 2016.

You should read this prospectus supplement in conjunction with the prospectus, including any supplements and amendments thereto. This prospectus supplement is qualified by reference to the prospectus except to the extent that the information in the prospectus supplement supersedes the information contained in the prospectus.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus, including any supplements and amendments thereto.

Our common stock is listed on the NYSE MKT under the symbol "APHB." On August 12, 2016, the last reported sale price of our common stock on the NYSE MKT was $1.92 per share.

Investment in our common stock involves risks. See "Risk Factors" on page 5 of the prospectus, as updated or superseded by the "Risk Factors" section beginning on page 22 of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2016.

Neither the Securities and Exchange Commission nor any state securities commission has passed upon the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is August 15, 2016.

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

x **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: 001-37544

AMPLIPHI BIOSCIENCES CORPORATION
(Exact name of registrant as specified in its charter)

Washington	**91-1549568**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

3579 Valley Centre Drive, Suite 100

San Diego, California
(Address of principal executive offices)

92130
(Zip Code)

Registrant's telephone number, including area code: **(858) 829-0829**

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 x 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 x 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 as defined in Rule 12b-2 of the Exchange Act. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ¨ Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if a small reporting company) Smaller reporting company x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ¨ No x

The number of shares of the Registrant's Common Stock, par value $0.01 per share, outstanding at August 8, 2016 was 11,120,394.

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AmpliPhi Biosciences Corporation

Consolidated Balance Sheets

	June 30, 2016 (Unaudited)	December 31, 2015
Assets		
Current assets		
Cash and cash equivalents	$7,144,000	$ 9,370,000
Accounts receivable	18,000	125,000
Prepaid expenses and other current assets	576,000	521,000
Total current assets	7,738,000	10,016,000
Property and equipment, net	1,210,000	1,131,000
In process research and development	12,446,000	12,446,000
Acquired patents, net	323,000	338,000
Goodwill	7,562,000	7,562,000
Total assets	$29,279,000	$ 31,493,000
Liabilities, Series B redeemable convertible preferred stock and stockholders' equity		
Current liabilities		
Accounts payable, accrued expenses and other	$2,239,000	$ 1,464,000
Deferred revenue	43,000	245,000
Accrued severance	72,000	308,000
Dividends payable	970,000	368,000
Total current liabilities	3,324,000	2,385,000
Derivative liabilities	1,466,000	1,499,000
Deferred tax liability	3,005,000	3,005,000
Total liabilities	7,795,000	6,889,000
Series B redeemable convertible preferred stock $0.01 par value, 9,357,935 shares authorized at June 30, 2016 and December 31, 2015, no shares and 7,527,853 shares issued and outstanding at June 30, 2016 and December 31, 2015, respectively (liquidation preference of $0 and $13,383,000 at June 30, 2016 and December 31, 2015, respectively)	-	11,890,000
Stockholders' equity		
Common stock, $0.01 par value, 670,000,000 shares authorized at June 30, 2016 and December 31, 2015, 11,120,394 and 5,883,503 shares issued and outstanding at June 30, 2016 and December 31, 2015, respectively	111,000	59,000
Additional paid-in capital	390,858,000	375,177,000
Accumulated deficit	(369,485,000)	(362,522,000)
Total stockholders' equity	21,484,000	12,714,000
Total liabilities, Series B redeemable convertible preferred stock and stockholders' equity	$29,279,000	$ 31,493,000

See accompanying condensed notes to consolidated financial statements.

AmpliPhi Biosciences Corporation

Consolidated Statements of Operations

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016 (Unaudited)	2015 (Unaudited)	2016 (Unaudited)	2015 (Unaudited)
Revenue	$ 103,000	$ 102,000	$ 209,000	$ 204,000
Operating expenses				
Research and development	1,241,000	1,077,000	3,221,000	2,049,000
General and administrative	2,451,000	1,617,000	5,095,000	3,014,000
Total operating expenses	3,692,000	2,694,000	8,316,000	5,063,000
Loss from operations	(3,589,000)	(2,592,000)	(8,107,000)	(4,859,000)
Other income (expense)				
Change in fair value of derivative liabilities	(35,000)	13,361,000	1,371,000	1,566,000
Other expense	(227,000)	-	(227,000)	(431,000)
Total other income (expense)	(262,000)	13,361,000	1,144,000	1,135,000
Net (loss) income	(3,851,000)	10,769,000	(6,963,000)	(3,724,000)
Excess of fair value of consideration transferred on conversion of Series B redeemable convertible preferred stock	(2,366,000)	-	(2,366,000)	-
Accretion of Series B redeemable convertible preferred stock	(133,000)	(1,828,000)	(1,858,000)	(2,166,000)
Net (loss) income attributable to common stockholders	$ (6,350,000)	$ 8,941,000	$ (11,187,000)	$ (5,890,000)
Per share information:				
Net (loss) income per share of common stock - basic	$ (0.73)	$ 1.27	$ (1.53)	$ (1.19)
Weighted average number of shares of common stock outstanding - basic	8,740,621	5,667,170	7,312,062	4,960,416
Net loss per share of common stock - diluted	$ (0.78)	$ (0.33)	$ (1.60)	$ (1.19)
Weighted average number of shares of common stock outstanding - diluted	8,768,059	7,545,487	7,325,781	4,960,416

See accompanying condensed notes to consolidated financial statements.

AmpliPhi Biosciences Corporation

Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity

	Redeemable Convertible Preferred Stock Series B		Stockholders' Equity Common Stock				
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
Balances, December 31, 2014	8,671,040	$1,990,000	3,983,182	$40,000	$365,403,000	$(362,006,000)	$3,437,000
Net loss	-	-	-	-	-	(516,000)	(516,000)
Accretion of dividends on Series B redeemable convertible preferred stock	-	1,307,000	-	-	(1,307,000)	-	(1,307,000)
Accretion to redemption value of Series B redeemable convertible stock	-	8,971,000	-	-	(8,971,000)	-	(8,971,000)
Conversion of Series B redeemable convertible preferred stock to common stock	(1,143,187)	(378,000)	228,637	2,000	1,504,000	-	1,506,000
Common stock issued in March 2015 financing, net of offering costs	-	-	1,575,758	16,000	8,250,000	-	8,266,000
Warrants exercised	-	-	56,645	1,000	1,072,000	-	1,073,000
Warrants reclassified from liabilities to equity due	-	-	-	-	5,462,000	-	5,462,000

to amendment of warrants							
Warrants reclassified from liabilities to equity due to increase in authorized shares	-	-	-	-	3,281,000	-	3,281,000
Exercise of common stock options and other	-	-	39,281	-	-	-	-
Stock-based compensation	-	-	-	-	479,000	-	479,000
Stock-based compensation - severance	-	-	-	-	4,000	-	4,000
Balances, December 31, 2015	7,527,853	11,890,000	5,883,503	59,000	375,177,000	(362,522,000)	12,714,000
Net loss	-	-	-	-	-	(6,963,000)	(6,963,000)
Accretion of dividends on Series B redeemable convertible preferred stock	-	365,000	-	-	(365,000)	-	(365,000)
Accretion to redemption value of Series B redeemable convertible stock	-	1,493,000	-	-	(1,493,000)	-	(1,493,000)
Conversion of Series B redeemable convertible preferred stock to common stock	(7,527,853)	(13,748,000)	2,359,025	24,000	11,820,000	-	11,844,000
Warrants issued for Novolytics assets	-	-	-	-	204,000	-	204,000
Common stock issued in June 2016 financing, net of offering costs and	-	-	2,127,660	21,000	2,613,000	-	2,634,000

warrants							
Common stock issued pursuant to anti-dilution rights	-	-	750,206	7,000	1,538,000	-	1,545,000
Stock-based compensation	-	-	-	-	1,364,000	-	1,364,000
Balances, June 30, 2016 (Unaudited)	-	$-	11,120,394	$111,000	$390,858,000	$(369,485,000)	$21,484,000

See accompanying condensed notes to consolidated financial statements.

AmpliPhi Biosciences Corporation

Consolidated Statement of Cash Flows

	Six Months Ended June 30,	
	2016 (Unaudited)	2015 (Unaudited)
Operating activities:		
Net loss	$(6,963,000)	$(3,724,000)
Adjustments required to reconcile net loss to net cash used in operating activities:		
Change in fair value of derivative liabilities	(1,371,000)	(1,566,000)
Warrants and other allocable expenses	431,000	213,000
Amortization of patents	15,000	15,000
Depreciation	158,000	117,000
Stock-based compensation	1,364,000	105,000
Changes in operating assets and liabilities:		
Accounts receivable	107,000	100,000
Accounts payable, accrued expenses, deferred revenue and other	573,000	181,000
Accrued severance	(236,000)	(234,000)
Prepaid expenses and other current assets	(55,000)	(174,000)
Net cash used in operating activities	(5,977,000)	(4,967,000)
Investing activities:		
Purchases of property and equipment	(237,000)	(44,000)
Net cash used in investing activities	(237,000)	(44,000)
Financing activities:		
Proceeds from warrant exercises	-	397,000
Costs of Series B redeemable convertible preferred stock conversion to common stock	(173,000)	-
Dividend payments	(63,000)	-
Proceeds from issuance of common stock, net	4,224,000	12,384,000
Net cash provided by financing activities	3,988,000	12,781,000
Net (decrease) increase in cash and cash equivalents	(2,226,000)	7,770,000
Cash and cash equivalents, beginning of period	9,370,000	6,581,000
Cash and cash equivalents, end of period	$7,144,000	$14,351,000
Supplemental schedule of non-cash financing activities:		
Accretion of Series B redeemable convertible preferred stock	$1,858,000	$2,166,000
Fair value of warrant liability upon issuance	1,816,000	4,210,000

See accompanying condensed notes to consolidated financial statements.

AmpliPhi Biosciences Corporation

Condensed Notes to Consolidated Financial Statements

June 30, 2016
(Unaudited)

1. Organization and Description of the Business

AmpliPhi Biosciences Corporation (the "Company") was incorporated in the state of Washington in 1989 under the name Targeted Genetics Corporation. In February 2011, Targeted Genetics Corporation changed its name to AmpliPhi Biosciences Corporation. The Company is dedicated to developing novel antibacterial therapies called bacteriophage (phage). Phages are naturally occurring viruses that preferentially target and kill their bacterial targets.

2. Liquidity

The Company has prepared these consolidated financial statements on a going concern basis, which assumes that the Company will realize its assets and satisfy its liabilities in the normal course of business. However, the Company has incurred net losses since its inception, has negative operating cash flows and has an accumulated deficit of $369.5 million as of June 30, 2016, $54.0 million of which has been accumulated since January of 2011, when the Company began its focus on bacteriophage development. As of June 30, 2016, the Company had cash and cash equivalents of $7.1 million. Management believes that the Company's existing resources will be sufficient to fund the Company's planned operations into the fourth quarter of 2016. These circumstances raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classifications of liabilities that may result from the outcome of the uncertainty concerning the Company's ability to continue as a going concern.

The Company's ability to raise additional funds will depend, in part, on the success of the Company's preclinical studies and clinical trials and other product development activities, regulatory events, the Company's ability to identify and enter into in-licensing or other strategic arrangements, and other events or conditions that may affect the value or prospects of the Company, as well as factors related to financial, economic, and market conditions, many of which are beyond the Company's control. The Company cannot be certain that sufficient funds will be available to it when required or on acceptable terms, if at all. If adequate funds are not available on a timely basis or on acceptable terms, the Company may be required to defer, reduce or eliminate significant planned expenditures, restructure, curtail or eliminate some or all of its development programs or other operations, dispose of technology or assets, pursue an acquisition of the Company by a third party at a price that may result in a loss on investment for its stockholders, enter

into arrangements that may require the Company to relinquish rights to certain of its product candidates technologies or potential markets, file for bankruptcy or cease operations altogether. Any of these events could have a material adverse effect on the Company's business, financial condition and results of operations and result in a loss of investment by its stockholders.

3. Significant Accounting Policies

The Company's significant accounting policies are described in Note 3 to the Consolidated Financial Statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the Securities and Exchange Commission (SEC). Since the date of those financial statements, there have been no material changes to the Company's significant accounting policies. The interim consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries Biocontrol Limited, Ampliphi d.o.o., and AmpliPhi Australia Pty Ltd. All significant intercompany accounts and transactions have been eliminated.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of the Company should be read in conjunction with the audited financial statements and notes thereto as of and for the year ended December 31, 2015 included in the Company's Annual Report on Form 10-K, filed with the SEC. The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) for interim financial statements and in accordance with the instructions to Form 10-Q. Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification (ASC) and Accounting Standards Update (ASU) of the Financial Accounting Standards Board (FASB).

In the opinion of management, the accompanying financial statements reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of June 30, 2016 and the results of its operations for the three and six months ended June 30, 2016 and 2015. Interim results are not necessarily indicative of results for the full year or any future period.

Reverse Stock Split

On August 3, 2015, the Company filed Articles of Amendment to Amended and Restated Articles of Incorporation with the Secretary of State of the State of Washington that effected a 1-for-50 (1:50) reverse stock split of its common stock, par value $0.01 per share, effective August 7, 2015. On August 3, 2015, the Company increased its authorized common stock, from 445,000,000 to 670,000,000 shares. The par value of its common stock was unchanged at $0.01 per share, post-split. All warrant, stock option, and per share information in the consolidated financial statements

gives retroactive effect to the 1-for-50 reverse stock split that was effected on August 7, 2015.

Use of Estimates

Management considers many factors in selecting appropriate financial accounting policies and controls, and in developing the estimates and assumptions that are used in the preparation of these financial statements. Management must apply significant judgment in this process. In addition, other factors may affect estimates, including expected business and operational changes, sensitivity and volatility associated with the assumptions used in developing estimates, and whether historical trends are expected to be representative of future trends. The estimation process often may yield a range of potentially reasonable estimates of the ultimate future outcomes and management must select an amount that falls within that range of reasonable estimates. This process may result in actual results differing materially from those estimated amounts used in the preparation of the financial statements if these results differ from historical experience, or other assumptions do not turn out to be substantially accurate, even if such assumptions are reasonable when made. In preparing these financial statements, management used significant estimates in the following areas, among others: the determination of the fair value of stock-based awards, the fair value of liability-classified derivatives, the fair value of liability-classified warrants, the valuation of long-lived assets, including in-process research and development (IPR&D), patents and goodwill, accrued expenses and the recoverability of the Company's net deferred tax assets and related valuation allowance.

Warrant and Preferred Shares Conversion Feature Liability

The Company accounts for both warrants with anti-dilution adjustment provisions and other features and preferred share features with anti-dilution adjustment provisions under the applicable accounting guidance which requires the warrant and the preferred share features to be recorded as liabilities and adjusted to fair value at each reporting period.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The ASU creates a single source of revenue guidance for companies in all industries. The new standard provides guidance for all revenue arising from contracts with customers and affects all entities that enter into contracts to provide goods or services to their customers, unless the contracts are within the scope of other accounting standards. It also provides a model for the measurement and recognition of gains and losses on the sale of certain nonfinancial assets. This guidance, as amended, must be adopted using either a full retrospective approach for all periods presented or a modified retrospective approach and will be effective for fiscal years beginning after December 15, 2017. The Company has not yet evaluated the potential impact of adopting the guidance on its consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, which defines management's responsibility to assess an entity's ability to continue as a going concern, and to provide related footnote disclosures if there is substantial doubt about its ability to continue as a going concern. The pronouncement is effective for annual reporting periods ending after December 15, 2016 with early adoption permitted. The adoption of this guidance is not expected to have a material impact on the Company's consolidated financial statements.

In February 2015, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which amends the FASB Accounting Standards Codification and creates Topic 842, "Leases." The new topic supersedes Topic 840, "Leases," and increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and requires disclosures of key information about leasing arrangements. The guidance is effective for reporting periods beginning after December 15, 2018. ASU 2016-02 mandates a modified retrospective transition method. The Company has not yet evaluated the potential impact of adopting the guidance on its consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes*. The ASU is part of a simplification initiative aimed at reducing complexity in accounting standards. Current GAAP requires the deferred taxes for each jurisdiction (or tax-paying component of a jurisdiction) to be presented as a net current asset or liability and net noncurrent asset or liability. To simplify presentation, the new guidance requires that all deferred tax assets and liabilities, along with any related valuation allowance, be classified as noncurrent on the balance sheet. The standard is effective for public entities for annual reporting periods beginning after December 15, 2016, and interim periods therein. Early adoption is permitted. The adoption of this guidance is not expected to have a material impact on the Company's results of operations or liquidity.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting*, which amends Accounting Standards Codification (“ASC”) Topic 718, Compensation – Stock Compensation. ASU 2016-09 simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years and early adoption is permitted. The Company has not yet evaluated the potential impact of adopting the guidance on its consolidated financial statements.

4. Fair Value of Financial Assets and Liabilities — Derivative Instruments

ASC Topic 820, *Fair Value Measurement* (ASC 820), establishes a fair value hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and the Company's own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances.

ASC 820 identifies fair value as the exchange price, or exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As a basis for considering market participant assumptions in fair value measurements, ASC Topic 820 establishes a three-tier fair value hierarchy that distinguishes among the following:

- Level 1—Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access.
- Level 2—Valuations based on quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active and models for which all significant inputs are observable, either directly or indirectly.
- Level 3—Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Items measured at fair value on a recurring basis include common stock warrants, embedded derivatives related to the Company's redeemable convertible preferred stock, and a dilutive financing derivative liability established on April 8, 2016 (see Note 6). During the periods presented, the Company has not changed the manner in which it values liabilities that are measured at fair value using Level 3 inputs. The following fair value hierarchy table presents information about each major category of the Company's financial liabilities measured at fair value on a recurring basis:

	Quoted Prices in Active Markets	Significant Other	Significant

	for Identical Items (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total
June 30, 2016				
Liabilities				
June 2016 offering warrant liability	$ -	$ -	$ 1,310,000	$1,310,000
Dilutive financing derivative liability	-	-	156,000	156,000
Total liabilities	$ -	$ -	$ 1,466,000	$1,466,000
December 31, 2015				
Liabilities				
Series B preferred stock derivative liability	$ -	$ -	$ 1,493,000	$1,493,000
Warrant liability	-	-	6,000	6,000
Total liabilities	$ -	$ -	$ 1,499,000	$1,499,000

There were no transfers between Level 1, Level 2 or Level 3 of the fair value hierarchy for the three and six months ended June 30, 2016 or the year ended December 31, 2015.

The following table sets forth a summary of changes in the fair value of the Company's derivative and warrant liabilities, which represents a recurring measurement that is classified within Level 3 of the fair value hierarchy, wherein fair value is estimated using significant unobservable inputs:

	Warrant Liability	June 2016 Offering Warrant Liability	Series B Preferred Stock Derivative Liability	Dilutive Financing Derivative Liability
Balance, December 31, 2015	$6,000	$ -	$ 1,493,000	$ -
Creation of dilutive financing derivative	-	1,816,000	-	1,067,000
Changes in estimated fair value	(6,000)	(506,000)	(1,493,000)	634,000
Payout from liability	-	-	-	(1,545,000)
Balance, June 30, 2016	$ -	$ 1,310,000	$ -	$ 156,000

The fair value of warrant liability related to warrants issued in 2011 on each re-measurement date classified as liabilities is estimated using the Monte Carlo valuation model. For this liability, the Company develops its own assumptions that do not have observable inputs or available market data to support the fair value. This method of valuation involves using inputs such as the fair value of the Company's common stock, stock price volatility, the contractual term of the warrants, risk–free interest rates and dividend yields. Due to the nature of these inputs, the valuation of the warrants is considered a Level 3 measurement. The following assumptions were used at June 30, 2016 and December 31, 2015:

	June 30, 2016 Series 2011		December 31, 2015 Series 2011	
Volatility	118	%	112	%
Expected term (years)	0.48		0.98	
Risk-free interest rate	0.35	%	0.64	%
Dividend yield	0.00	%	0.00	%
Exercise price	$ 23.00		$ 23.00	
Common stock closing price	$ 1.55		$ 3.98	

The fair value of the June 2016 offering warrants derivative liability on the date of issuance and on each re-measurement date classified as liabilities is estimated using the Black-Scholes valuation model. This method of valuation involves using inputs such as the fair value of the Company's common stock, stock price volatility, risk–free interest rates and dividend yields. Due to the nature of these inputs, the valuation of the warrants is considered a Level 3 measurement. The following assumptions were used at the June 3, 2016 issuance date and June 30, 2016:

	June 30, 2016		June 3, 2016	
Volatility	122	%	123	%
Expected term (years)	4.93		5.00	
Risk-free interest rate	1.01	%	1.23	%
Dividend yield	0.00	%	0.00	%
Exercise price	$ 2.25		$ 2.25	
Common stock closing price	$ 1.55		$ 2.06	

The fair value of the Series B preferred stock derivative liability on each measurement date is estimated using the Monte Carlo valuation model. For this liability, the Company develops its own assumptions that do not have observable inputs or available market data to support the fair value. This method of valuation involves using inputs such as the fair value of the Company's common stock, stock price volatility, the expected term of the Series B redeemable convertible preferred stock, risk–free interest rates and dividend yields. Due to the nature of these inputs, the valuation of the Series B redeemable convertible preferred conversion liability is considered a Level 3 measurement. On April 8, 2016, all outstanding Series B preferred stock was converted into common stock, and the remaining Series B preferred stock derivative liability balance of $91,000 was reversed and recorded as a gain in derivative liability on the Company's statements of operations for the three and six months ended June 30, 2016. The

following assumptions were used at December 31, 2015:

	December 31, 2015	
Volatility	108 to 117	%
Expected term (years), weighted average	0.50 to 2.50	
Risk-free interest rate	0.49 to 1.19	%
Dividend yield	0.00	%
Exercise price	$ 7.00	
Common stock closing price	$ 3.98	

The fair value of the dilutive financing derivative liability on each measurement date is estimated using the Monte Carlo valuation model (see Note 6). For this liability, the Company develops its own assumptions that do not have observable inputs or available market data to support the fair value. This method of valuation involves using inputs such as the fair value of the Company's common stock, stock price volatility, expected future financings, risk–free interest rates and dividend yields. Due to the nature of these inputs, the valuation of future potential dilutive financings is considered a Level 3 measurement. The following assumptions were used during the second quarter ended June 30, 2016 to value the derivative liability:

Volatility	108 to 118	%
Expected term (years), weighted average	2.00 to 2.23	
Risk-free interest rate	0.58 to 0.79	%
Dividend yield	0.00	%
Stock price dilutive limit	$2.35 to 4.05	
Common stock closing price	$1.55 to 3.68	

The dilutive financing derivative liability was recorded on the accompanying consolidated balance sheet at its initial value on April 8, 2016. On June 3, 2016, the derivative was revalued as a result of the closing of a common stock and warrant financing on such date (see Note 8).

As of June 30, 2016, all of the Company's derivative liabilities were marked-to-market with the changes in fair value recorded as a component of change in fair value of derivative liabilities on the Company's Statements of Operations.

5. Net Loss per Common Share

The following table sets forth the computation of basic and diluted net loss per share for the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016	2015	2016	2015
Basic and diluted net loss per common share calculation:				
Net (loss) income	$(3,851,000)	$10,769,000	$(6,963,000)	$(3,724,000)
Excess of fair value of consideration transferred on conversion of Series B redeemable convertible preferred stock	(2,366,000)	-	(2,366,000)	-
Accretion of Series B redeemable convertible preferred stock	(133,000)	(1,828,000)	(1,858,000)	(2,166,000)
Net (loss) income attributable to common stockholders	$(6,350,000)	$8,941,000	$(11,187,000)	$(5,890,000)
Weighted average common shares outstanding - basic	8,740,621	5,667,170	7,312,062	4,960,416
Net (loss) income per share of common stock - basic	$(0.73)	$1.27	$(1.53)	$(1.19)
Weighted average common shares outstanding - diluted	8,768,059	7,545,487	7,325,781	4,960,416
Net loss per share of common stock - diluted	$(0.78)	$(0.33)	$(1.60)	$(1.19)

The numerator for the diluted loss per share for the three and six months ended June 30, 2016, has been increased by $506,000 due to a gain associated with the Company's June 2016 offering warrant liability.

The numerator for the basic loss per share for the three months ended June 30, 2015, has been decreased by $1,716,000 due to amounts related to preferred stockholders' participation in the Company's undistributed earnings. The numerator for the diluted loss per share for the three months ended June 30, 2015 has been decreased by $1,716,000 noted above and also decreased by $9,707,000 due to gains associated with certain warrants and preferred stock derivatives.

The following outstanding securities at June 30, 2016 and 2015 have been excluded from the computation of diluted weighted shares outstanding for the six months ended June 30, 2016 and 2015, as they would have been anti-dilutive:

	June 30, 2016	2015
Options	739,021	360,635
Warrants	1,379,648	1,209,650
Series B redeemable convertible preferred stock	-	1,658,071
Total	2,118,669	3,228,356

6. Redeemable Convertible Preferred Stock

On June 13, 2013, the Company's Board of Directors approved a resolution designating 9,357,935 shares of Preferred Stock as Series B redeemable convertible preferred stock (Series B) with an initial stated value of $1.40 and par value of $0.01 per share. As of April 7, 2016, each Series B share was convertible into 0.20 shares of common stock and was entitled to the number of votes equal to the number of shares of common stock into which such Series B share could be converted. The Series B shares were convertible into common stock by the holder of the shares at any time. The Series B shares were subject to automatic conversion into common stock upon the election of the holders of at least two-thirds of the outstanding Series B shares. In addition, pursuant to the Company's Articles of Incorporation, the Series B shares were automatically convertible into common stock upon the occurrence of an underwritten initial public offering by the Company that satisfied certain conditions. Holders of the Series B shares were entitled to receive cumulative, cash dividends at the rate of 10% of the Series B stated value. Such dividends accrued from day-to-day commencing on the original issue date, whether or not earned or declared by the Board of Directors, and were compounded annually. The Series B shares were redeemable by the Company at any time on or after June 26, 2018, upon the election of the holders of at least two-thirds of the outstanding Series B shares for an amount equal to the original issue price per share plus any accrued and unpaid dividends. Holders of the Series B shares were entitled to a liquidation preference in an amount equal to the Series B stated value of $1.40 per share plus all accrued and unpaid dividends in the event of a liquidation, dissolution, or winding-up of the Company, or in the event of a merger or acquisition of the Company. In connection with the private placement of Series B shares, the Company recorded a liability for an embedded derivative that required bifurcation under the applicable accounting guidance. The embedded derivative included a redemption feature, multiple dividend features, as well as multiple conversion features with specified anti-dilution adjustments for certain financing transactions involving the issuance of securities at a price below a minimum issuance price of $7.00 per share.

As of April 7, 2016, the Company had accreted $1,868,000 from additional paid-in capital to Series B redeemable convertible preferred stock to adjust the redemption value of the Series B to actual at that date.

On April 8, 2016, certain holders (the "Holders") of over two-thirds of the Company's then-outstanding shares of the Series B stock elected to automatically convert all outstanding shares of Series B into shares of common stock in accordance with Section 4.4.4(b)(ii) of the Company's Amended and Restated Articles of Incorporation (the "Conversion"). As a result of the Conversion, the 7,527,853 shares of Series B outstanding as of immediately prior to the Conversion were converted into an aggregate of 1,505,560 shares of common stock.

On April 8, 2016, the Company entered into a Common Stock Issuance Agreement (the "CSIA") with the Holders pursuant to which the Company agreed to issue the Holders an aggregate of 853,465 shares of the Company's common stock. Pursuant to the CSIA, the Company and the Holders also agreed to amend the common stock warrants previously issued to the Holders in June 2013 in order to reduce the exercise price of such warrants from $7.00 per share to $4.05 per share and extend the expiration date thereof from June 26, 2018 to March 31, 2021 (the "Warrant Amendments"). As consideration for the shares and the Warrant Amendments, the Holders waived their right to receive approximately $2.2 million in aggregate cash payments to which they were entitled upon the Conversion in respect of accrued dividends on their former shares of Series B. The Holders also waived their registration rights with respect to certain future registration statements that may be filed, and certain future public offerings that may be conducted, by the Company.

The transaction was accounted for based on the difference between the fair value of the consideration transferred to the holders of the preferred stock and the carrying amount of the preferred stock on April 7, 2016.

The terms of the CSIA provide that if, after the date of the CSIA, the Company conducts one or more bona fide equity financings in which it sells shares of common stock or preferred stock at a price less than $4.05 per share (each, a "dilutive financing"), the Company will be required to issue to the Holders additional shares of common stock based on a specified formula until the obligation expires. The obligation to issue additional shares in the event of any such dilutive financing (i) only applies to the lowest priced financing conducted after the date of the CSIA, (ii) is subject to limitations under applicable NYSE MKT rules relating to the issuance of additional shares in a private placement at a price less than the greater of book or market value and (iii) will expire at such time the Company has raised $10.0 million in gross proceeds from the sale of common stock and/or preferred stock in a bona fide financing or financings or June 30, 2018, whichever occurs first.

On June 3, 2016, the Company completed a registered public offering of shares of common stock and warrants at a combined per share purchase price of $2.35, resulting in aggregate gross proceeds of $5.0 million (see Note 8). The offering qualified as a dilutive financing under the terms of the CSIA. As a result of the offering, the threshold per share sale price to trigger the Company's obligation to issue additional shares in connection with a future dilutive

financing effectively decreased from $4.05 to $2.35.

On June 20, 2016, the Company obtained stockholder approval for the issuance of up to 1,037,053 shares of common stock to the Holders to the extent required by the terms of the CSIA in connection with one or more dilutive financings completed subsequent to the agreement date.

The CSIA requires the delivery of shares in the event of a future dilutive financing. The Company determined this was a conditional forward contract and recorded a derivative liability as of April 8, 2016 in the amount of $1.1 million for potential future dilutive financings. On June 3, 2016, the future financing derivative liability was adjusted by the fair value of the dilutive shares issuable of $1.5 million as a result of the June offering. The derivative liability was re-valued on June 3, 2016 as a result of the June 2016 offering, and marked-to-market as of June 30, 2016, resulting in a combined charge of $0.6 million to change in fair value of derivative liabilities for the three and six months ended June 30, 2016.

The June 30, 2016 balance sheet reflects dividends payable of $970,000 to former holders of preferred stock, which are classified as current liabilities.

7. Warrants

On January 4, 2016, the Company entered into an Asset Purchase Agreement with Novolytics Limited (the “Purchase Agreement”), to purchase certain preclinical materials and intangible assets, including patent rights, from Novolytics, an unrelated third party. In consideration for the assets acquired, the Company paid cash consideration of approximately $205,000 and issued warrants to purchase an aggregate of 170,000 shares of the Company’s common stock. The warrants have an exercise price of $12.00 per share and contain certain registration rights. The fair value of the warrants issued was $204,000, based on a Monte Carlo valuation model and are classified as equity within the consolidated balance sheet. The Company expensed the total value provided for the acquired assets of $409,000 as in-process research and development as of the acquisition date given there was no alternative future use of the acquired assets due to the early stage nature of the technology and pre-clinical materials.

On April 8, 2016, the Company modified 315,244 warrants held by the Holders, in accordance with the terms of the CSIA dated April 8, 2016 (see Note 6).

On June 3, 2016, the Company issued warrants exercisable for an aggregate of 1,063,830 shares of common stock at an exercise price of $2.25 per share in connection with the closing of a common stock and warrant financing (see Note 8).

The following table provides a summary of warrants outstanding, issued or exercised for the six months ended June 30, 2016. Also included is the average exercise price per share and the aggregate proceeds to the Company if exercised as of June 30, 2016.

	Warrants Outstanding by Exercise Price Range							
	$2.25		$4.05 - $8.25		$10.75 - $23.00		Totals	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Balance, December 31, 2015	-	$ -	694,062	$ 5.82	515,587	$ 11.39	1,209,649	$ 8.19
Issuances	1,063,830	2.25	-	-	170,000	12.00	1,233,830	3.59
Exercises	-	-	-	-	-	-	-	-
Balance, June 30, 2016	1,063,830	$ 2.25	694,062	$ 5.82	685,587	$ 11.54	2,443,479	$ 5.87
Aggregate proceeds if exercised	$2,393,618		$4,036,474		$7,914,572		$14,344,664	

8. Stockholders' Equity

On May 31, 2016, the Company entered into a Securities Purchase Agreement (the "SPA") with certain purchasers providing for the sale and issuance in a registered public offering of an aggregate of 2,127,660 shares of the Company's common stock and warrants to purchase 1,063,830 shares of the Company's common stock. Each share of common stock was sold together with a warrant to purchase 0.50 of a share of common stock at a combined purchase price of $2.35 per unit, for aggregate gross proceeds to the Company of $5.0 million. The offering closed on June 3, 2016. The warrants have an exercise price of $2.25 per share, were exercisable immediately upon issuance and expire five years following the date of issuance. The Company received net proceeds from the offering of approximately $4.2 million after deducting placement agent fees and other offering expenses payable by the Company.

Pursuant to a Placement Agent Agreement dated May 31, 2016, by and between the Company and Roth Capital Partners, LLC ("Roth") and Griffin Securities, Inc. ("Griffin"), Roth and Griffin acted as co-placement agents for the offering. The Company agreed to pay an aggregate cash fee for placement agent services equal to 7% of the gross proceeds of the offering (the "Placement Agent Fee"), as well as a non-refundable legal reimbursement fee of $75,000.

The Company evaluated the warrants issued in the offering and determined the warrant instruments do not qualify for the scope exception in ASC 815, due to certain net cash settlement provisions in the warrant agreement. The Company recorded a derivative liability for the estimated fair value of the warrants issued in connection with the offering in the amount of $1.8 million (based on a Black-Scholes Option Pricing Model assuming no dividend yield, volatility of 123%, and a risk-free interest rate of 1.23%). The remaining balance of $3.2 million, after deducting for the fair value of the warrants, was allocated to the value of the common stock. Offering costs directly allocable to the offering totaled $0.8 million, including placement agent fees and legal expenses. Of this amount, $0.2 million was allocable to the warrants and recorded as other expense on the Company's Statements of Operations based on the relative fair value of the warrant to the common stock.

The derivative liability for the warrants was marked-to-market at June 30, 2016, with the decrease in fair value of $0.5 million recorded as a component of change in fair value of derivative liability on the Company's Statements of Operations (see Note 4).

On March 16, 2015, the Company issued and sold 1,575,758 shares of common stock in a private placement at a price of $8.25 per share, for aggregate proceeds of $13.0 million. In conjunction with this private placement, the Company issued warrants to purchase an aggregate of 393,939 shares of common stock at an exercise price of $10.75 per share to the purchasers of the common stock. The Company paid $833,000 in fees to its placement agents, along with the issuance of warrants to purchase an aggregate of 94,545 shares of common stock at an exercise price of $10.75 per share. The Company valued these warrants as liability instruments and recorded a liability of $4,210,000 as of March 16, 2015. In the first quarter of 2015, the Company recorded $213,000 of other expenses representing the portion of the initial warrant value of the placement agent warrants related to the initial fair value of the warrants issued to the purchasers of the common stock. The remainder of the initial fair value of the warrants of $3,996,000 was treated as a reduction of additional paid-in-capital. In addition, $218,000 of the fees paid to a placement agent were expensed as other expenses in the six months ended June 30, 2015 as they also represented issuance costs related to the initial fair value of the warrants issued to the purchasers of the common stock.

9. Stock-Based Compensation

Share-based Compensation

In June 2016, the Company's stockholders approved the 2016 Equity Incentive Plan (the 2016 Plan). The plan provides for the issuance of incentive awards in the form of non-qualified and incentive stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and performance-based stock awards. The awards may be granted by the Company's Board of Directors to its employees, directors and officers and to consultants, agents, advisors and independent contractors who provide services to the Company or to a subsidiary of the Company. The exercise price for stock options must not be less than the fair market value of the underlying shares on the date of grant. Stock options expire no later than ten years from the date of grant and generally vest and typically become exercisable over a four-year period following the date of grant. Upon the exercise of stock options, the Company issues the resulting shares from shares reserved for issuance under the Stock Incentive Plan. With the approval of the 2016 Plan, 1,000,000 new shares were added and the remaining unallocated shares from the Company's 2013 Stock Incentive Plan were allocated to the 2016 Plan.

The Company accounts for stock options and restricted stock units related to its stock incentive plans under the provisions of ASC 718, which requires the recognition of the fair value of stock-based compensation. The fair value of stock options was estimated using a Black-Scholes option valuation model. This model requires the input of subjective assumptions in implementing ASC 718, including expected dividend, expected life, expected volatility and forfeiture rate of each award, as well as the prevailing risk-free interest rate and the fair value of the underlying common stock on the date of grant. The fair value of equity-based awards is amortized over the vesting period of the award, and the Company has elected to use the straight-line method of amortization. The assumptions used in the Black-Scholes option valuation model for the three months ended June 30, 2016 are set forth below.

- *Expected Dividend*: The Company does not anticipate paying any dividends on its common stock.
- *Expected Life*: The expected life represents the period that the Company expects its stock-based awards to be outstanding. The Company's expected life assumption was based on the simplified method set forth in the SEC Staff Accounting Bulletin 110. The Company's estimation of the expected life for stock options granted to parties other than employees or directors is the contractual term of the option award.
- *Expected Volatility:* Expected volatility is the measure by which the Company's stock price is expected to fluctuate during the expected term of an option. The Company's expected volatility represents the weighted average historical volatility of the shares of its common stock.
- *Risk-Free Interest Rate*: The Company bases the risk-free interest rate used on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent remaining term. Where the expected term of its stock-based awards does not correspond with the terms for which interest rates are quoted, the Company performs a straight-line interpolation to determine the rate from the available term maturities.
- *Forfeiture Rate*: The Company applies an estimated forfeiture rate that is derived from historical forfeited shares. If the actual number of forfeitures differs from our estimates, the Company may record additional adjustments to

compensation expense in future periods.

The weighted-average assumptions used in the Black-Scholes option pricing model to determine the fair value of the stock option grants were as follows for the six months ended June 30, 2016:

	June 30, 2016	
Risk-free interest rate	1.46 to 1.63	%
Expected volatility	113 to 115	%
Expected term (in years)	6.0	
Expected dividend yield	0.0	%

Stock-based compensation expense is reduced by an estimated forfeiture rate derived from historical employee termination behavior. If the actual number of forfeitures differs from the Company's estimates, the Company may record adjustments to increase or decrease compensation expense in future periods.

The estimated grant-date fair value of the Company's stock-based awards is amortized ratably over the awards' service periods. Stock-based compensation expense recognized was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2016 (Unaudited)	2015 (Unaudited)	2016 (Unaudited)	2015 (Unaudited)
Research and development	$ 26,000	$ 30,000	$ 52,000	$ 59,000
General and administrative	522,000	22,000	1,312,000	46,000
Total stock-based compensation	$ 548,000	$ 52,000	$ 1,364,000	$ 105,000

The following table summarizes stock option activity for the six months ended June 30, 2016:

		Options Outstanding			
	Shares Available For Grant	Shares	Weighted Average Exercise Price	Average Remaining Contractual Term (Years)	Intrinsic Value
Balance, December 31, 2015	723,431	669,769	$ 8.68	9.29	$ -
Granted	(224,208)	224,208	2.85	-	-
Exercised	-	-	-	-	-
Forfeited	150,956	(150,856)	9.03	-	-
Expired	-	(4,100)	14.39	-	-
Shares authorized	1,000,000	-	-	-	-
Balance, June 30, 2016	1,650,179	739,021	$ 6.81	8.99	$ -
Vested or expected to vest at June 30, 2016		612,640	$ 7.18	8.91	$ -
Exercisable at June 30, 2016		154,312	$ 8.93	7.91	$ -

The intrinsic value of options exercisable as of June 30, 2016 was $0.0, based on the Company's closing stock price of $1.55 per share and the exercise price of the options.

During the six months ended June 30, 2016, the Company issued 224,208 common stock options to its employees and an executive with an average exercise price of $2.85 per share. Included in this amount were 99,919 stock options, with an exercise price of $2.85, to its Chief Financial Officer, pursuant to his employment agreement dated January 18, 2016. There were no grants of stock options to employees or directors during the three and six months ended June 30, 2015.

As of June 30, 2016, there was $2.2 million of total unrecognized compensation expense related to unvested stock options, which the Company expects to recognize over the weighted average remaining period of 2.75 years.

Shares Reserved For Future Issuance

As of June 30, 2016, the Company had reserved shares of its common stock for future issuance as follows:

	Shares Reserved
Stock options outstanding	739,021
Available for future grants under the 2016 Plan	1,650,179
Warrants	2,443,479
Total shares reserved	4,832,679

Employee Stock Purchase Plan (ESPP)

On June 20, 2016, the Company's stockholders approved the Company's 2016 Employee Stock Purchase Plan (the "ESPP"). The ESPP allows eligible employees on a voluntary basis to purchase shares of the Company's common stock. The shares are sold to participants at a price equal to the lesser of 85% of the fair market value of the Company's common stock at the (i) beginning of the six month offering period, or (ii) end of the six month purchase period. The ESPP provides for four six month purchase periods during each 24 month term. The initial shares provided for under the plan are 120,000, and automatically increase annually as allowed for under the ESPP, beginning January 1, 2017 and through January 1, 2026.

As of the six months ended June 30, 2016, no shares have been issued under the ESPP.

10. Collaborative and Other Agreements

In June 2013, the Company entered into a Collaborative Research and Development Agreement with the United States Army Medical Research and Materiel Command and the Walter Reed Army Institute of Research. The Collaborative Research and Development Agreement is focused on developing and commercializing bacteriophage therapeutics to treat *S. aureus* infections. During the three and six months ended June 30, 2016 and 2015, the Company recorded no payments to Walter Reed Army Institute of Research under the Collaborative Research and Development Agreement.

In March 2013, the Company entered into an Exclusive Channel Collaboration Agreement with Intrexon Corporation (the "ECC Agreement"). This agreement allowed the Company to utilize Intrexon's synthetic biology platform for the identification, development and production of bacteriophage-containing human therapeutics. The Company paid a one-time technology access fee in 2013 to Intrexon of $3,000,000 in common stock. Pursuant to the agreement, the Company was required to pay Intrexon, in cash or stock, milestone fees of $2,500,000 for the initiation and commencement of the first Phase 2 trial and $5,000,000 upon the first regulatory approval of any product in any major market country. With regard to each product sold by the Company, the Company was required to pay, in cash, tiered royalties on a quarterly basis based on net sales of AmpliPhi Products, calculated on a product-by-product basis. No milestones have been met and no milestone payments have been paid to Intrexon through June 30, 2016. During the three and six months ended June 30, 2016, the Company recorded $22,000 and $76,000, respectively, in expenses under the Exclusive Channel Collaboration Agreement, with cash payments totaling $60,000 and $117,000, respectively. During the three and six months ended June 30, 2015, the Company recorded $22,000 and $44,000, respectively, in expenses under the Exclusive Channel Collaboration Agreement, with cash payments for the three and six months ended June 30, 2015 and totaling $31,000 and $35,000, respectively. On April 13, 2016, the Company provided written notice to Intrexon of its election to voluntarily terminate the ECC Agreement. The effective date of the termination was July 12, 2016. As of June 30, 2016, the Company had a liability of $15,000 recorded for amounts due to Intrexon. The Company did not incur any early termination penalties as a result of the termination of the ECC Agreement.

In April 2013, the Company entered into a collaboration agreement with the University of Leicester to develop a phage therapy that targets and kills all toxin types of *C. difficile.* In August 2013, the Company entered into a collaboration agreement with both the University of Leicester and the University of Glasgow to carry out certain animal model development work. Under these agreements, which are referred to collectively as the Leicester Development Agreements, the Company provides payments to the University of Leicester to carry out *in vitro* and to the University of Glasgow to carry out animal model development work on the University of Leicester's development of a bacteriophage therapeutic to resolve *C. difficile* infections. The Company licensed related patents, materials and know-how from the University of Leicester. Under the Leicester Development Agreements, the University of Leicester will provide the bacteriophage and act as overall project coordinator for the development work. All rights, title and interest to any intellectual property developed under the Leicester Development Agreements belong to the Company. Under the Leicester License Agreement, the Company has exclusive rights to certain background intellectual property of the University of Leicester, for which it will pay the University of Leicester royalties based on product sales and make certain milestone payments based on product development. In November 2015, the Company renewed this collaboration, effective as of November 12, 2015. This agreement expires November 12, 2018. During the three and six months ended June 30, 2016, the Company recorded $43,000 and $86,000, respectively, in expenses to the University of Leicester under the Leicester Development Agreements, with cash payments totaling $94,000 and $140,000, respectively. During the three and six months ended June 30, 2015, the Company recorded $53,000 and $88,000, respectively, in expenses to the University of Leicester under the Leicester Development Agreements, with cash payments in the amount of $115,000 and $165,000, respectively. During the three and six months ended June 30, 2016, the Company recognized no expense and made no payments to the University of Glasgow under the Leicester Development Agreements. During the three and six months ended June 30, 2015, the Company recorded $0 and $13,000, respectively in expenses to the University of Glasgow under the Leicester Development Agreements, with cash payments totaling $0 and $61,000, respectively.

In September 2015, the Company entered into a non-exclusive patent license agreement with Takara Bio Inc. (the Takara Agreement). Under this agreement Takara licensed certain patents from the Company related to AAV1 Vector gene delivery systems, for which the Company is an exclusive licensor with the University of Pennsylvania. The Company received a $40,000 non-refundable, up-front licensing payment and is entitled to receive royalties from Takara of 12.0% of net license product sales and 6.0% of service revenues associated with the licensed products. The agreement calls for minimum annual royalties of $15,000 commencing on February 28, 2016. In addition, the Takara Agreement provides milestone fees to the Company of $30,000 of the first $1,000,000 of licensed product revenues by Takara and an additional $40,000 when cumulative net sales of the licensed product by Takara exceed $2,000,000. During the three and six months ended June 30, 2016 the Company recognized revenue of $4,000 and $8,000, respectively, under the Takara Agreement.

11. Severance Charge

In September of 2014 and 2015 two executives separated from the Company. The Company recorded severance expenses in the respective periods and accrued severance related to the cash portion due over time.

The severance accrual as of December 31, 2015 and June 30, 2016 is as follows:

Accrued severance, December 31, 2015	$308,000
Cash payments in 2016	(236,000)
Accrued severance, June 30, 2016	$72,000

12. Legal Proceedings

On April 14, 2016, NRM VII Holdings I, LLC (“NRM”), filed a complaint against the Company and the current members of the Company’s Board of Directors in the Superior Court of California, County of San Diego, which complaint was amended on July 25, 2016. NRM, together with its affiliates, is one of the principal stockholders of the Company. The amended complaint (the “complaint”) alleges that the Company breached the implied covenant of good faith and fair dealing by entering into a scheme to force NRM to convert its Series B Shares into shares of common stock. The complaint further alleges that the members of the Board who are named as defendants breached their fiduciary duty of good faith and loyalty owed to NRM, as one of the Company’s stockholders, by participating in this alleged scheme. The complaint seeks unspecified monetary damages and other relief. The Company plans to vigorously defend against the claims advanced.

The Company determines whether it should accrue an estimated loss for a contingency in a particular legal proceeding by assessing whether a loss is deemed probable and whether the amount can be reasonably estimated. Claim estimates that are probable and can be reasonably estimated are reflected as liabilities. Legal proceedings are inherently unpredictable and the matters in which the Company may be involved often will present complex legal and factual issues. Because of the uncertainties related to the Company's pending litigation, investigations, inquiries or claims, management is currently unable to predict the ultimate outcome of any litigation, investigation, inquiry or claim, determine whether a liability has been incurred, or make an estimate regarding the possible loss or range of loss that could result from an unfavorable outcome. It is reasonably possible that some of the matters which may be asserted could be decided unfavorably to the Company. An adverse ruling or outcome in any lawsuit involving the Company could materially affect its business, liquidity, consolidated financial position or results of operations. In view of the unpredictable nature of such matters, the Company cannot provide any assurances regarding the outcome of any litigation, investigation, inquiry or claim to which it is a party of the impact on the Company of an adverse ruling on such matters.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited consolidated financial statements and related notes included in this Quarterly Report on Form 10-Q, and the audited financial statements and notes thereto as of and for the year ended December 31, 2015 included in our Annual Report on Form 10-K filed with the SEC.

Statements contained in this report that are not statements of historical fact are forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, without limitation, statements concerning product development plans, the use of bacteriophages to kill bacterial pathogens, having resources sufficient to fund our operations into the fourth quarter of 2016, future funding sources, general and administrative expenses, clinical trial and other research and development expenses, capital resources, capital expenditures, tax credits and carry-forwards, and additional financings and litigation-related matters. Words such as "believe," "anticipate," "plan," "expect," "intend," "will," "goal," "potential" and similar expressions are intended to id forward-looking statements, though not all forward-looking statements necessarily contain these identifying words. These statements are subject to risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below under Part II, Item 1A, "Risk Factors" and elsewhere in this Quarterly Report on Form 10-Q. These forward-looking statements speak only as of the date on which they were made, and we undertake no obligation to update any forward-looking statements.

Overview

We are a biotechnology company focused on the discovery, development and commercialization of novel phage therapeutics. Phage therapeutics use bacteriophages, a family of viruses, to kill pathogenic bacteria. Phages have powerful and highly selective mechanisms of action that permit them to target and kill specific bacteria. We believe that phages represent a promising means to treat bacterial infections, especially those that have developed resistance to current therapies including the so-called multi-drug-resistant or "superbug" strains of bacteria.

Our goal is to be the leading developer of phage therapeutics. We are combining our expertise in the manufacture of drug-quality bacteriophages and our proprietary approach and expertise in identifying, characterizing and developing naturally occurring bacteriophages with that of our collaboration partners in bacteriophage biology, synthetic biology and manufacturing, to develop second-generation bacteriophage products.

Our lead product candidate is AB-SA01 for the treatment of *S. aureus* infections, including methicillin-resistant *S. aureus*, or MRSA. We also have AB-PA01 for the treatment of *P. aeruginosa* infections in development, and AB-CD01 for the treatment of *C. difficile* infections in preclinical development.

We have generally incurred net losses since our inception and our operations to date have been primarily limited to research and development and raising capital. Since the shift in our focus to novel therapeutics in February 2011 through June 30, 2016, we have received approximately $46.1 million in net proceeds from the issuance of our equity securities and convertible debt securities. As of June 30, 2016, we had an accumulated deficit of $369.5 million. We anticipate that a substantial portion of our capital resources and efforts in the foreseeable future will be focused on completing the development and obtaining regulatory approval of our product candidates.

We currently expect to use our existing cash and cash equivalents for the continued research and development of our product candidates and for working capital and other general corporate purposes.

We expect our research and development expenses to increase for the foreseeable future as we continue development of our product candidates. We also expect to incur additional expenses associated with operating as a public company. As a result, we expect to continue to incur significant and increasing operating losses at least for the next several years. We do not expect to generate product revenue unless and until we successfully complete development and obtain marketing approval for at least one of our product candidates.

We may also use a portion of our existing cash and cash equivalents for the potential acquisition of, or investment in, product candidates, technologies, formulations or companies that complement our business, although we have no current understandings, commitments or agreements to do so. Our existing cash and cash equivalents will not be sufficient to enable us to complete all necessary development of any potential product candidates. Accordingly, we will be required to obtain further funding through one or more other public or private equity offerings, debt financings, collaboration or licensing arrangements or other sources. Adequate additional funding may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on acceptable terms, we may be required to defer, reduce or eliminate significant planned expenditures, restructure, curtail or eliminate some or all of our development programs or other operations, dispose of assets, enter into arrangements that may require us to relinquish rights to certain of our product candidates, technologies or potential markets, file for bankruptcy or cease operations altogether. Any of these events could have a material adverse effect on our business, financial condition and results of operations and result in a loss of investment by our stockholders.

Recent Events

On June 2016, we completed a registered public offering of an aggregate of 2,127,660 shares of our common stock and warrants to purchase 1,063,830 shares of our common stock. Each share of common stock was sold together with a warrant to purchase 0.50 of a share of common stock at a combined purchase price of $2.35, resulting in aggregate net proceeds to us of approximately $4.2 million after deducting placement agent fees and other offering expenses

payable by us.

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In connection with the foregoing offering, in June 2016 we also issued an aggregate of 750,206 shares of our common stock, for no additional consideration, to certain former holders of our Series B redeemable convertible preferred stock pursuant to the terms of our Common Stock Issuance Agreement dated April 8, 2016 with such holders.

In August 2016, we completed patient enrollment in our Phase 1 clinical trial to evaluate the safety of AB-SA01, a bacteriophage targeting *S. aureus* infections, administered topically to the intact skin of healthy adults. The trial is being conducted under our collaborative research and development agreement with the U.S. Army at the Walter Reed Army Institute of Research Clinical Trials Center in Silver Spring, Maryland. The double-blind, ascending dose study is designed to evaluate the safety of AB-SA01 administered topically to the skin of twelve healthy adult volunteers between the ages of 18 and 60 years in each of two dose cohorts. Participants in the low- and high-dose cohorts will receive either 3 x 108 or 3 x 109 PFU/mL of AB-SA01, respectively, administered topically to the forearm with an occlusive bandage. Placebo will be administered to the opposite forearm, allowing each participant to serve as his or her own control. Participants will receive AB-SA01 and placebo daily for three consecutive days and will be followed for 10-14 days after the final treatment.

Results of Operations

Comparison of three and six months ended June 30, 2016 and 2015

Revenue

For each of the quarters and each of the six months ended June 30, 2016 and 2015 we recognized $0.1 million and $0.2 million, respectively, in revenue related to our former gene therapy program.

Research and Development Expenses

Research and development expenses for the quarter ended June 30, 2016 totaled $1.2 million compared to $1.1 million for the same period of 2015. The increase of $0.1 million was primarily related to increased personnel costs as other costs remained consistent between the periods.

Research and development expenses for the six months ended June 30, 2016 totaled $3.2 million compared to $2.0 million incurred in the same period of 2015. This increase of $1.2 million was primarily related to higher compensation costs of $0.4 million, $0.1 million of professional recruiting fees, and $0.4 million for the expense recorded related to the assets acquired from Novolytics.

We anticipate that research and development spending to remain relatively flat in the second half of 2016 as compared to the first half of 2016, but may increase in future periods as we initiate non-clinical research studies, hire additional research and development staff, advance our clinical trials, and continue our discovery efforts.

General and Administrative Expenses

General and administrative expenses for the quarter ended June 30, 2016 were $2.5 million compared to $1.6 million for the same period of 2015. The $0.9 million increase was primarily attributable to $0.6 million of increases in compensation including $0.5 million of non-cash stock-based compensation related to two new executives.

General and administrative expenses for the six months ended June 30, 2016 were $5.1 million compared to $3.0 million for the same period of 2015. The $2.1 million increase was primarily attributable to $1.6 million of compensation, including $1.2 million of non-cash stock-based compensation related to two new executives, $0.1 million for professional recruitment fees and $0.1 million in increased director compensation.

We expect our general and administrative expenses to remain relatively flat in the second half of 2016 as compared to the first half of 2016.

Other Income (Expense)

We recorded a net loss of $35,000 for the three months ended June 30, 2016 related to the change to the fair value of our derivative liabilities. The net loss was the result of a gain of $508,000 related primarily to the change in fair value of our derivative liability for warrants issued in June 2016, a gain of $91,000 related to the change in fair value of our Series B preferred stock derivative liability, and a loss of $634,000 related to the change in fair value of our dilutive financing derivative liability.

We recorded a net gain of $1.4 million for the six months ended June 30, 2016 related to the change to the fair value of our derivative liabilities. The net gain was the result of a gain of $0.5 million related primarily to the change in fair value of our derivative liability for warrants issued in June 2016, a gain of $1.5 million related to the change in fair value of our Series B preferred stock derivative liability, and a loss of $0.6 million related to the change in fair value

of our dilutive financing derivative liability established during the quarter ended June 30, 2016.

We recorded a net gain of $13.4 million for the three months ended June 30, 2015 related to the change to the fair value of our derivative liabilities. The net gain was the result of a gain of $4.6 million related to the change in fair value of our derivative liability for warrants issued in 2011, and a gain of $8.8 million related to the change in fair value of our Series B preferred stock derivative liability.

We recorded a net gain of $1.6 million for the six months ended June 30, 2015 related to the change to the fair value of our derivative liabilities. The net gain was the primarily the result of a gain of $1.7 million related to the change in fair value of our Series B preferred stock derivative liability.

We will continue to adjust the liability related to our outstanding warrant derivative liabilities to fair value until the earlier of exercise or expiration of the warrants or until terms of the warrants no longer require them to be accounted for as liability instruments. We will continue to adjust the liability related to our dilutive financing derivative until the obligation to issue additional shares in the event of a future dilutive financing is met or expires.

We recorded expenses of $0.2 million for the six months ended June 30, 2016 consisting of placement agent fees and other offering costs from our June 2016 registered public offering of common stock and warrants. We recorded expenses of $0.4 million for the six months ended June 30, 2015 consisting of placement agent costs from our March 2015 private placement of common stock, which related to placement agent fees and the initial fair value of warrants issued to the placement agents.

Liquidity and Capital Resources

We have incurred net losses since inception through June 30, 2016 of $369.5 million, of which $315.5 million was incurred as a result of our prior focus on gene therapy in fiscal years 2010 and earlier. We have not generated any product revenues and do not expect to generate revenue from product candidates in the near term.

We had cash and cash equivalents of $7.1 million and $9.4 million at June 30, 2016 and December 31, 2015, respectively.

Net cash used in operating activities for the six months ended June 30, 2016 was $6.0 million, as compared to $5.0 million for the six months ended June 30, 2015. Net loss recorded during the six months ended June 30, 2016 was $7.0 million, inclusive of a $1.4 million non-cash gain on derivative liabilities. Net loss recorded during the six months ended June 30, 2015 was $3.7 million, inclusive of a $1.6 million non-cash gain on derivative liability. The

net increase in cash used in operating activities of $1.0 million, in addition to the effect of the non-cash derivative liability effects noted above, are primarily related to an increase in research and development efforts, compensation costs, as well as an increase in professional services.

Net cash used in investing activities was $0.2 million and $0.0 million for the six months ended June 30, 2016 and June 30, 2015, respectively, and was primarily attributable to purchases of property and equipment.

Cash provided by financing activities for the six months ended June 30, 2016 was comprised of net proceeds of $4.2 million from the June 2016 offering of common stock and warrants to purchase common stock, after deducting placement agent fees and other expenses related to the issuance of approximately $0.8 million. Cash provided by financing activities for the six months ended June 30, 2015 was comprised of gross proceeds of $13.0 million from the March 2015 private placement of common stock and warrants to purchase common stock, less commissions and other expenses related to the issuance of approximately $0.6 million.

We will need to raise additional capital to continue to fund our future operations. Our future funding requirements will depend on many factors, including:

- the costs and timing of our research and development activities;
- the progress and cost of our clinical trials and other research and development activities;
- the cost and timing of securing manufacturing capabilities for our clinical product candidates and commercial products, if any;
- the terms and timing of any collaborative, licensing, acquisition or other arrangements that we may establish;
- the costs and timing of seeking regulatory approvals;
- the costs of filing, prosecuting and enforcing any patent applications, claims, patents and other intellectual property rights; and
- the costs of lawsuits involving us or our product candidates.

We may seek to raise capital through a variety of sources, including:

- the public equity market;
- private equity financings;
- collaborative arrangements;
- licensing arrangements; and/or
- public or private debt.

We believe our existing resources are sufficient to fund our planned operations into the fourth quarter of 2016. This estimate is based on our current product development calendar, projected staffing expenses, working capital requirements, and capital expenditure plans.

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Our ability to raise additional funds will depend in part on the success of our preclinical studies and clinical trials and other product development activities, regulatory events, our ability to identify and enter into in-licensing or other strategic arrangements, and other events or conditions that may affect our value or prospects, as well as, factors related to financial, economic and market conditions, many of which are beyond our control. We cannot be certain that sufficient funds will be available to us when required or on acceptable terms. If we are unable to secure additional funds on a timely basis or on acceptable terms we may be required to defer, reduce or eliminate significant planned expenditures, restructure, curtail or eliminate some or all of our development programs or other operations, dispose of technology or assets, pursue an acquisition of our company by a third party at a price that may result in a loss on investment for our stockholders, enter into arrangements that may require us to relinquish rights to certain of our product candidates, technologies or potential markets, file for bankruptcy or cease operations altogether. Any of these events could have a material adverse effect on our business, financial condition and results of operations. Moreover, if we are unable to obtain additional funds on a timely basis, there will be substantial doubt about our ability to continue as a going concern and increased risk of insolvency and loss of investment by our stockholders. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities could result in dilution to our existing stockholders.

Off-Balance Sheet Arrangements

As of June 30, 2016, we did not have off-balance sheet arrangements.

Recent Accounting Pronouncements

Refer to *Note 3* of the Condensed Consolidated Notes to the Consolidated Financial Statements contained elsewhere in this report.

Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company as defined by Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are not required to provide the information required under this item.

Item 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of the end of the period covered by this report. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective disclosure controls system, misstatements due to error or fraud may occur and not be detected.

Based on this evaluation, our Chief Executive Officer and Chief Financial Officer, have concluded that our disclosure controls and procedures were not effective at the reasonable assurance level as of the end of the period covered by this report as a result of the material weakness identified in our internal control over financial reporting as of December 31, 2015, as described further below.

Changes in Internal Control Over Financial Reporting

An evaluation was also performed under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of any change in our internal control over financial reporting that occurred during our last fiscal quarter and that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. That evaluation did not identify any change in our internal control over financial reporting that occurred during our latest fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Remediation of Material Weakness

As of December 31, 2015, our management identified a material weakness in our internal controls over financial reporting and concluded that, as of such date, we did not maintain adequate and effective internal control in the area of complex and non-routine transactions and in the application of Accounting Standards Codification No. 260, “Earnings Per Share,” and consequently our internal control over financial reporting was not effective at a reasonable assurance level. Based on that conclusion, we continue to review, document and test our internal control over financial

reporting. We also continue to take steps to remediate certain identified deficiencies in our internal control over financial reporting as of December 31, 2015 in the area of complex and non-routine transactions. Steps taken during the last fiscal quarter that resulted in improvements to our internal control over financial reporting included the following:

· the addition of and training of qualified personnel to identify and evaluate complex and non-routine transactions;
· the development of specific procedures for the evaluation, documentation and review of complex and non-routine transactions; and
· continued implementation of standardized financial control and reporting processes.

The remediation actions will be monitored by the Audit Committee of our Board of Directors.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

On April 14, 2016, NRM VII Holdings I, LLC ("NRM"), filed a complaint against us and the current members of our Board of Directors in the Superior Court of California, County of San Diego, which complaint was amended on July 25, 2016. NRM, together with its affiliates, is one of our principal stockholders. The amended complaint (the "complaint") alleges that we breached the implied covenant of good faith and fair dealing by entering into a scheme to force NRM to convert its shares of Series B redeemable convertible preferred stock into shares of our common stock. The complaint further alleges that the members of the Board who are named as defendants breached their fiduciary duty of good faith and loyalty owed to NRM, as one of our stockholders, by participating in this alleged scheme. The complaint seeks unspecified monetary damages and other relief. We plan to vigorously defend against the claims advanced.

Claim estimates that are probable and can be reasonably estimated are reflected as liabilities. Because of the uncertainties related to our pending litigation, investigations, inquiries or claims, management is currently unable to predict the ultimate outcome of any litigation, investigation, inquiry or claim, determine whether a liability has been incurred, or make an estimate regarding the possible loss or range of loss that could result from an unfavorable outcome. It is reasonably possible that some of the matters, which are pending or may be asserted, could be decided unfavorably to us. Although we maintain liability insurance coverage to protect our assets from losses arising out of or involving activities associated with ongoing and normal business operations, our insurance may not adequately cover, any liabilities that we incur. An adverse ruling or outcome in any lawsuit involving us could materially affect our business, liquidity, consolidated financial position or results of operations. In view of the unpredictable nature of such matters, we cannot provide any assurances regarding the outcome of any litigation, investigation, inquiry or claim to which we are a party or the impact on us of an adverse ruling of such matters.

Item 1A. Risk Factors

You should consider carefully the following information about the risks described below, together with the other information contained in this Quarterly Report and in our other public filings in evaluating our business. The risk factors set forth below that are marked with an asterisk (*) did not appear as separate risk factors in, or contain changes to the similarly titled risk factors included in, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015. If any of the following risks actually occur, our business, financial condition, results of operations, and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline.

Risks Related to Our Financial Condition and Need for Additional Capital

We have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and our future profitability is uncertain.*

We have incurred losses in each year since our inception in 1992. Prior to our merger with Biocontrol in January 2011, our accumulated deficit was $315.5 million. Since January 2011 through June 30, 2016, we have incurred an accumulated deficit of $54.0 million, and we expect to incur losses for the foreseeable future. We have devoted, and will continue to devote for the foreseeable future, substantially all of our resources to research and development of our product candidates. For the three and six months ended June 30, 2016 we had an operating loss of $3.6 million and $8.1 million, respectively. Additional information regarding our results of operations may be found in our consolidated financial statements and in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this report.

Clinical trials and activities associated with discovery research are costly. We do not expect to generate any revenue from the commercial sales of our product candidates in the near term, and we expect to continue to have significant losses for the foreseeable future.

To attain ongoing profitability, we will need to develop products successfully and market and sell them effectively, or rely on other parties to do so. We cannot predict when we will achieve ongoing profitability, if at all. We have never generated revenue from the commercial sales of our product candidates, and there is no guarantee that we will be able to do so in the future. If we fail to become profitable, or if we are unable to fund our continuing losses, our business, financial condition and results of operations may be materially adversely impacted and our stock price could decline.

We have never generated any revenue from product sales and may never be profitable.

Our ability to generate meaningful revenue and achieve profitability depends on our ability, and the ability of any third party with which we may partner, to successfully complete the development of, and obtain the regulatory approvals necessary to, commercialize our product candidates. We do not anticipate generating revenues from product sales for the foreseeable future, if ever. If any of our product candidates fail in clinical trials or if any of our product candidates do not gain regulatory approval, or if any of our product candidates, if approved, fail to achieve market acceptance, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our ability to generate future revenues from product sales depends heavily on our success in:

- completing research and preclinical and clinical development of our product candidates;
- seeking and obtaining regulatory and marketing approvals for product candidates for which we complete clinical trials;
- developing a sustainable, scalable, reproducible, and transferable manufacturing process for our product candidates;
- launching and commercializing product candidates for which we obtain regulatory and marketing approval, either by establishing a sales force, marketing and distribution infrastructure, or by collaborating with a partner;
- obtaining market acceptance of any approved products;
- addressing any competing technological and market developments;
- implementing additional internal systems and infrastructure, as needed;
- identifying and validating new product candidates;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter;
- maintaining, protecting and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- attracting, hiring and retaining qualified personnel.

Even if one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product. Our expenses could increase beyond expectations if we are required by the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or other foreign regulatory authorities to perform clinical trials and other studies in addition to those that we currently anticipate. Even if we are able to generate revenues from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

We will need to raise additional capital to continue operations.*

Our consolidated financial statements for the quarter ended June 30, 2016 were prepared under the assumption that we would continue our operations as a going concern. However, we have had recurring losses from operations, negative operating cash flow and an accumulated deficit.

We do not generate any cash from operations and must raise additional funds in order to continue operating our business. We expect to continue to fund our operations primarily through equity and debt financings in the future. If additional capital is not available to us when needed or on acceptable terms, we may not be able to continue to operate our business pursuant to our business plan or we may have to discontinue our operations entirely. As of June 30, 2016, we had cash and cash equivalents of $7.1 million. We believe that our existing resources will be sufficient to fund our planned operations into the fourth quarter of 2016.

Developing drugs and conducting clinical trials is expensive. Our future funding requirements will depend on many factors, including:

- the costs and timing of our research and development activities;
- the progress and cost of our clinical trials and other research and development activities;
- the cost and timing of securing manufacturing capabilities for our clinical product candidates and commercial products, if any;
- the terms and timing of any collaborative, licensing, acquisition or other arrangements that we may establish;
- the costs and timing of seeking regulatory approvals;
- the costs of filing, prosecuting, defending and enforcing any patent applications, claims, patents and other intellectual property rights; and
- the costs of lawsuits involving us or our product candidates.

We will need to raise additional capital to support our product development activities in 2016 and beyond. We may seek funds through arrangements with collaborators or others that may require us to relinquish rights to the products candidates that we might otherwise seek to develop or commercialize independently. We cannot be certain that we will be able to enter into any such arrangements on reasonable terms, if at all.

We may seek to raise capital through a variety of sources, including:

- the public equity market;
- private equity financings;
- collaborative arrangements;
- licensing arrangements; and/or
- public or private debt.

Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. Our ability to raise additional funds will depend, in part, the success of our preclinical studies and clinical trials and other product development activities, regulatory events, our ability to identify and enter into in-licensing or other strategic arrangements, and other events or conditions that may affect our value or prospects, as well as factors related to financial, economic and market conditions, many of which are beyond our control. We cannot be certain that sufficient funds will be available to us when required or on acceptable terms, if at all. Raising additional capital through the sale of securities could cause significant dilution to our stockholders. If we are unable to secure additional funds on a timely basis or on acceptable terms, we may be required to defer, reduce or eliminate significant planned expenditures, restructure, curtail or eliminate some or all of our development programs or other operations, dispose of technology or assets, pursue an acquisition of our company by a third party at a price that may result in a loss on investment for our stockholders, enter into arrangements that may require us to relinquish rights to certain of our product candidates, technologies or potential markets, file for bankruptcy or cease operations altogether. Any of these events could have a material adverse effect on our business, financial condition and results of operations. Moreover, if we are unable to obtain additional funds on a timely basis, there will be substantial doubt about our ability to continue as a going concern and increased risk of insolvency and loss of investment by our stockholders.

A complaint has been filed against us and the members of our Board of Directors by one of our principal stockholders.*

On April 8, 2016, certain holders (the "Holders") of over two-thirds of our then-outstanding shares of Series B redeemable convertible preferred stock ("Series B Preferred") elected to automatically convert all outstanding shares of Series B Preferred into shares of Common Stock in accordance with Section 4.4.4(b)(ii) of our Amended and Restated Articles of Incorporation, as amended (the "Conversion"). As a result of the Conversion, the 7,527,853 shares of Series B Preferred outstanding as of immediately prior to the Conversion were automatically converted into an aggregate of 1,505,560 shares of our common stock. On April 8, 2016, we entered into a Common Stock Issuance Agreement (the "CSIA") with the Holders pursuant to which we issued to the Holders an aggregate of 853,465 shares of our Common Stock (the "Shares") and amended the common stock warrants issued to the Holders pursuant to that certain Subscription Agreement, dated June 25, 2013, in order to reduce the exercise price of such warrants from $7.00 per share to $4.05 per share and extend the expiration date thereof from June 26, 2018 to March 31, 2021 (the "Warrant Amendments"). As consideration for the Shares and the Warrant Amendments, the Holders waived their right to receive approximately $2.2 million in aggregate cash payments to which they were entitled upon the Conversion in respect of accrued dividends on their former shares of Series B Preferred.

On April 14, 2016, NRM VII Holdings I, LLC ("NRM"), which was not a party to the CSIA, filed a complaint against us and each of the current members of our Board of Directors in the Superior Court of California, County of San Diego, which complaint was amended on July 25, 2016. Prior to the Conversion, NRM held approximately 28.5% of our outstanding shares of Series B Preferred. The complaint alleges that we breached the implied covenant of good faith and fair dealing by entering into a scheme to force NRM to convert its Series B Preferred into common stock. The complaint further alleges that the current members of our Board of Directors breached their fiduciary duty of good faith and loyalty owed to NRM, as one of our stockholders, by participating in this alleged scheme. The

complaint seeks unspecified monetary damages and other relief. We plan to vigorously defend against the claims advanced.

Litigation is subject to inherent uncertainties, and an adverse result in the matter described above or other matters that may arise from time to time could have a material adverse effect on our business, results of operations and financial condition. Any litigation to which we are subject may be costly and, further, could require significant involvement of our senior management and may divert management's attention from our business and operations. In addition, our share price may be negatively impacted due to the negative publicity, expenses incurred in connection with our defense, management distraction, and/or other factors related to this litigation. In addition, litigation of this nature may negatively impact our ability to attract and retain strategic partners, as well as qualified board members