

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

FORM 10-Q

(Mark One)

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 \_\_\_\_\_

Commission file number: 001-36333

**Bio-Path Holdings, Inc.**

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of  
incorporation or organization)

87-0652870

(I.R.S. Employer  
Identification No.)

4710 Bellaire Boulevard, Suite 210, Bellaire, Texas 77401

(Address of principal executive offices)

Registrant's telephone no., including area code: (832) 742-1357

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

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

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

Large accelerated filer

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

Accelerated filer

Smaller reporting company

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

At August 1, 2016, the Company had 95,645,224 outstanding shares of common stock, par value \$0.001 per share.

Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to “we,” “our,” “us,” “the Company” and “Bio-Path” refer to Bio-Path Holdings, Inc. and its subsidiary. Bio-Path Holdings, Inc.’s wholly-owned subsidiary, Bio-Path, Inc., is sometimes referred to herein as “Bio-Path Subsidiary.”

#### **CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This Quarterly Report on Form 10-Q contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward-looking statements can be identified by words such as “anticipate,” “expect,” “intend,” “plan,” “believe,” “seek,” “estimate,” “project,” “goal,” “strategy,” “future,” “likely,” “may,” “should,” “will” and variations of these words and similar references to future periods, although not all forward-looking statements contain these identifying words. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent risks, uncertainties, and changes in circumstances, including those discussed in “Item 1A. Risk Factors” to Part I of our Annual Report on Form 10-K as of the fiscal year ended December 31, 2015, and in other reports or documents we file with the U.S. Securities and Exchange Commission (“SEC”). As a result, our actual results may differ materially from those expressed or forecasted in the forward-looking statements, and you should not rely on such forward-looking statements. Please refer to “Item 1A. Risk Factors” to Part I of our Annual Report on Form 10-K as of the fiscal year ended December 31, 2015, and other reports or documents we file with the SEC for a discussion of risks and factors that could cause our actual results and financial condition to differ materially from those expressed or forecasted in this Quarterly Report on Form 10-Q.

Any forward-looking statement made by us in this Quarterly Report on Form 10-Q is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise. However, you should carefully review the risk factors set forth in other reports or documents we file from time to time with the SEC.

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PART I - FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

BIO-PATH HOLDINGS, INC.

CONSOLIDATED BALANCE SHEETS  
(In thousands, except share data)  
(Unaudited)

	As of June 30, 2016	As of December 31, 2015
<b>Assets</b>		
Current assets		
Cash	\$ 4,224	\$ 8,854
Prepaid drug product for testing	579	560
Other current assets	1,276	179
Total current assets	6,079	9,593
Fixed assets		
Furniture, fixtures & equipment	123	123
Less Accumulated Depreciation	(72)	(51)
	51	72
Other assets		
Technology licenses	2,500	2,500
Less Accumulated Amortization	(1,490)	(1,410)
	1,010	1,090
<b>Total Assets</b>	<b>\$ 7,140</b>	<b>\$ 10,755</b>
<b>Liabilities &amp; Shareholders' Equity</b>		
Current liabilities		
Accounts payable	123	54
Accrued expense	690	883
Total current liabilities	813	937
<b>Total Liabilities</b>	<b>813</b>	<b>937</b>
Shareholders' Equity		
Preferred Stock, \$.001 par value 10,000,000 shares authorized, no shares issued and outstanding	-	-
Common Stock, \$.001 par value, 200,000,000 shares authorized 89,762,872 and 89,762,872 shares issued and outstanding as of 6/30/16 and 12/31/15, respectively	90	90
Additional paid in capital	35,430	35,112
Accumulated deficit	(29,193)	(25,384)
Total shareholders' equity	6,327	9,818
<b>Total Liabilities &amp; Shareholders' Equity</b>	<b>\$ 7,140</b>	<b>\$ 10,755</b>

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**BIO-PATH HOLDINGS, INC.**

**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(In thousands, except per share amounts)  
(Unaudited)

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2016</u>	<u>2015</u>	<u>2016</u>	<u>2015</u>
<b>Revenue</b>	\$ -	\$ -	\$ -	\$ -
<b>Operating expenses</b>				
Research and development	1,187	564	2,207	1,157
General and administrative	757	567	1,606	1,353
Total operating expenses	<u>1,944</u>	<u>1,131</u>	<u>3,813</u>	<u>2,510</u>
<b>Net operating loss</b>	\$ (1,944)	\$ (1,131)	\$ (3,813)	\$ (2,510)
<b>Other income (expense)</b>				
Interest income	<u>2</u>	<u>5</u>	<u>4</u>	<u>10</u>
<b>Total other income (expense)</b>	<u>2</u>	<u>5</u>	<u>4</u>	<u>10</u>
<b>Net loss</b>	\$ (1,942)	\$ (1,126)	\$ (3,809)	\$ (2,500)
<b>Net loss per share, basic and diluted</b>	\$ (0.02)	\$ (0.01)	\$ (0.04)	\$ (0.03)
<b>Basic and diluted weighted average number of common shares outstanding</b>	<u>89,763</u>	<u>89,763</u>	<u>89,763</u>	<u>89,763</u>

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

BIO-PATH HOLDINGS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS  
(In thousands)  
(Unaudited)

	<b>Six Months Ended June 30,</b>	
	<b>2016</b>	<b>2015</b>
<b>Cash flow from operating activities</b>		
Net loss	\$ (3,809)	\$ (2,500)
Adjustments to reconcile net loss to net cash used in operating activities		
Amortization	80	80
Depreciation	21	21
Stock-based compensation	318	184
(Increase) decrease in assets		
Prepaid drug product for testing	(19)	(541)
Other current assets	(1,097)	(153)
Increase (decrease) in liabilities		
Accounts payable and accrued expenses	(124)	130
Net cash used in operating activities	<u>(4,630)</u>	<u>(2,779)</u>
<b>Net increase (decrease) in cash</b>	<b>(4,630)</b>	<b>(2,779)</b>
Cash, beginning of period	<u>8,854</u>	<u>13,859</u>
Cash, end of period	<u>\$ 4,224</u>	<u>\$ 11,080</u>

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## BIO-PATH HOLDINGS, INC.

### Notes to the Unaudited Consolidated Financial Statements for the Period Ended June 30, 2016

Unless the context requires otherwise, references in these Notes to the Unaudited Consolidated Financial Statements to “we,” “our,” “us,” “the Company” and “Bio-Path” refer to Bio-Path Holdings, Inc. and its subsidiary. Bio-Path Holdings, Inc.’s wholly-owned subsidiary, Bio-Path, Inc., is sometimes referred to herein as “Bio-Path Subsidiary.”

The accompanying interim financial statements have been prepared with the instructions to Form 10-Q pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”) and, therefore, do not include all information and footnotes necessary for a complete presentation of the Company’s financial position, results of operations, cash flows, and stockholders’ equity in conformity with generally accepted accounting principles. In the opinion of management, all adjustments considered necessary for a fair presentation of the results of operations and financial position have been included and all such adjustments are of a normal recurring nature. The unaudited quarterly financial statements should be read in conjunction with the audited financial statements and notes thereto included in the Annual Report on Form 10-K of the Company as of and for the fiscal year ended December 31, 2015. The results of operations for the period ended June 30, 2016, are not necessarily indicative of the results for a full-year period.

#### 1. Organization and Business

The Company is a clinical and preclinical stage oncology focused antisense drug development company utilizing a novel technology that achieves systemic delivery for target specific protein inhibition for any gene product that is over-expressed in disease. The Company’s drug delivery and antisense technology, called DNABilize™, is a platform that uses P-ethoxy, which is a deoxyribonucleic acid (DNA) backbone modification that is intended to protect the DNA from destruction by the body’s enzymes when circulating in vivo, incorporated inside of a neutral charged lipid bilayer. The Company believes this combination allows for high efficiency loading of antisense DNA into non-toxic, cell-membrane-like structures for delivery of the antisense drug substance into cells. In vivo, the DNABilize™ delivered antisense drug substances are systemically distributed throughout the body to allow for reduction or elimination of proteins in blood diseases and solid organs.

Using DNABilize™ as a platform for drug manufacturing, the Company currently has two antisense drug candidates in development to treat a total of five different disease indications. The Company’s lead drug candidate, Liposomal Grb2 (“BP1001”), targets the protein Grb2 and is preparing to enter the efficacy portion of a Phase II clinical trial for acute myeloid leukemia and the safety segment of a Phase II clinical trial for blast phase and accelerated phase chronic myelogenous leukemia. BP1001 is also in preclinical studies for solid tumors, including triple negative breast cancer and inflammatory breast cancer.

The Company’s second drug candidate, Liposomal Bcl2 (“BP1002”), targets the protein Bcl2, which is responsible for driving cell proliferation in up to 60% of all cancers. BP1002 is in preparation for an Investigational New Drug application.

Bio-Path Subsidiary was founded in May 2007 as a Utah corporation. In February 2008, Bio-Path Subsidiary completed a reverse merger with Ogden Golf Co. Corporation, a public company traded over the counter that had no current operations. The name of Ogden Golf was changed to Bio-Path Holdings, Inc. and the directors and officers of Bio-Path, Inc. became the directors and officers of Bio-Path Holdings, Inc. The Company’s operations to date have been limited to organizing and staffing the Company, acquiring, developing and securing its technology and undertaking product development for a limited number of product candidates.

In June 2015, the Company established an “at the market” (“ATM”) program through which it may offer and sell up to \$25.0 million of its common stock from time to time, at Bio-Path’s discretion, through an investment banking firm, acting as sales agent. Sales of Bio-Path common stock under the ATM program will be made directly on or through the NASDAQ Capital Market, among other methods. Pursuant to the Securities Purchase Agreement (as defined below), the Company is subject to certain restrictions on its ability to offer and sell shares of common stock under the ATM program. As of June 30, 2016, the Company has not offered or sold any shares of its common stock under the ATM program.

As of June 30, 2016, Bio-Path had \$4.2 million in cash on hand.

As the Company has not begun its planned principal operations of commercializing a product candidate, the Company’s activities are subject to significant risks and uncertainties, including the potential requirement to secure additional funding, the outcome of the Company’s clinical trials, and failing to operationalize the Company’s current drug candidates before another company develops similar products.

## **2. Recent Accounting Pronouncements**

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases*. The new standard establishes a right-of-use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. Management is currently evaluating the impact of future adoption of the new standard on the Company’s consolidated financial statements.

In March 2016, the FASB issued Accounting Standards Update No. 2016-09, *Stock Compensation*. The new standard simplifies certain aspects of the accounting for share-based payment award transactions by allowing entities to continue to use current GAAP by estimating the number of awards that are expected to vest or, alternatively, entities can elect to account for forfeitures as they occur. The new standard is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Management is currently evaluating the impact of future potential adoption of the new standard on the Company’s consolidated financial statements.

Management has reviewed all other recently issued pronouncements and has determined they will have no material impact on the Company’s consolidated financial statements.

## **3. Prepaid Drug Product for Testing**

Advance payments, including nonrefundable amounts, for goods or services that will be used or rendered for future clinical development activities are deferred and capitalized. Such amounts will be recognized as an expense as the related goods are delivered or the related services are performed. The Company incurred installments to its contract drug manufacturing and raw material suppliers totaling \$0.6 million in late 2015 pursuant to drug supply contracts for the manufacture and delivery of the Company’s lead drug product for testing in a Phase II clinical trial. This amount was carried on the Balance Sheet as of December 31, 2015 at cost as Prepaid Drug Product for Testing. The Company recognized certain expenses and incurred additional installment costs during 2016, with advanced payments totaling \$0.6 million, which are carried on the Balance Sheet as of June 30, 2016 as Prepaid Drug Product for Testing (See Note 9).

## **4. Other Current Assets**

As of June 30, 2016, Other Current Assets included prepaid expenses of \$1.3 million, comprised primarily of prepayments made to the Company’s clinical research organization in preparation for our Phase II clinical trial for BP1001 in AML. As of December 31, 2015, Other Current Assets included prepaid expenses of \$0.2 million.

## 5. Accounts Payable

As of June 30, 2016, Current Liabilities included accounts payable of \$0.1 million, comprised primarily of amounts owed for preclinical studies, corporate communications expenses, legal fees and manufacturing development and testing services. By the first week of August 2016, the June 30, 2016 amounts included in accounts payable had been substantially paid. As of December 31, 2015, Current Liabilities included accounts payable of \$0.1 million.

## 6. Accrued Expense

As of June 30, 2016, Current Liabilities included accrued expense of \$0.7 million for clinical trial expenses, legal fees, preclinical studies, accrued vacation and employee bonus accrual. As of December 31, 2015, Current Liabilities included accrued expense of \$0.9 million.

## 7. Stockholders' Equity

Stockholders' Equity totaled \$6.3 million as of June 30, 2016 compared to \$9.8 million as of December 31, 2015. There were 89,762,872 shares of common stock issued and outstanding as of June 30, 2016. There were no preferred shares outstanding as of June 30, 2016.

## 8. Stock-Based Compensation and Warrants

**The Plan** - In 2007, the Company adopted the First Amended 2007 Stock Incentive Plan, as amended (the "Plan"). The Plan provides for the grant of Incentive Stock Options, Nonqualified Stock Options, Restricted Stock Awards, Restricted Stock Unit Awards, Performance Awards and other stock-based awards, or any combination of the foregoing to the Company's key employees, non-employee directors and consultants. Under the Plan, the exercise price is determined by the Board of Directors or the compensation committee of the Board of Directors, and for options intended to qualify as qualified incentive stock options, may not be less than the fair market value as determined by the closing stock price at the date of the grant. Each option and award shall vest and expire as determined by the Board of Directors or the compensation committee. Options expire no later than ten years from the date of grant. All grants provide for accelerated vesting if there is a change of control, as defined in the Plan.

Stock-based compensation expense was \$0.2 million and \$0.1 million for the three months ended June 30, 2016 and June 30, 2015, respectively. Of these amounts, stock-based compensation expense for personnel involved in the Company's general and administrative activities for both the three months ended June 30, 2016 and June 30, 2015 was \$0.1 million. Stock-based compensation expense for personnel involved in the Company's research and development activities for the three months ended June 30, 2016 and June 30, 2015 was \$0.1 million and \$32,000, respectively.

Stock-based compensation expense was \$0.3 million and \$0.2 million for the six months ended June 30, 2016 and June 30, 2015, respectively. Of these amounts, stock-based compensation expense for personnel involved in the Company's general and administrative activities for the six months ended June 30, 2016 and June 30, 2015 was \$0.2 million and \$0.1 million, respectively. Stock-based compensation expense for personnel involved in the Company's research and development activities for both the six months ended June 30, 2016 and June 30, 2015 was \$0.1 million.

The Company utilized the Black-Scholes valuation model for estimating the fair value of the stock options granted, with the following weighted-average assumptions for options granted in the six months ended June 30, 2016 and 2015:

	2016	2015
Risk-free interest rate	1.37%	1.65%
Expected volatility	109%	139%
Expected term in years	6.1	6.1
Dividend yield	-%	-%

The following summary represents option activity under the Company's stock-based compensation plan for the six months ended June 30, 2016:

	<b>Options</b>	<b>Weighted- Average Exercise Price</b>
	<b>(in thousands)</b>	
Outstanding at December 31, 2015	5,752	\$ 1.05
Granted	1,300	2.55
Outstanding at June 30, 2016	<u>7,052</u>	<u>1.33</u>
Exercisable at June 30, 2016	<u>5,345</u>	<u>\$ 1.00</u>

As of June 30, 2016, the aggregate intrinsic value of outstanding stock options was \$5.7 million. The aggregate intrinsic value represents the total pretax intrinsic value (the difference between the Company's closing stock price on June 30, 2016 and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on June 30, 2016. This amount changes based on the fair market value of the Company's stock.

**Warrants** - There were no warrants for services granted during the three months ended June 30, 2016. The Company had 10,000 warrants for services outstanding as of June 30, 2016 with a weighted average exercise price of \$0.90. The warrants issued in connection with the sale of units of common stock were for cash value received and as such were not grants of compensation-based warrants.

## 9. Commitments and Contingencies

**Technology License** - The Company has negotiated exclusive licenses from MD Anderson to develop drug delivery technology for antisense and siRNA drug products. These licenses require, among other things, the Company to reimburse MD Anderson for ongoing patent expense and an annual license maintenance fee. The annual license maintenance fee attributable to the License Agreement totaling \$0.1 million was included in Current Liabilities as of December 31, 2015 and was paid in April 2016.

**Operating Lease** - In April 2014, the Company entered into a lease agreement for a larger office space, which it occupied as of August 2014. The remaining lease payments due under this lease as of June 30, 2016 are \$0.3 million.

In April 2016, the Company entered into a three-year lease agreement for lab space located in Bellaire, Texas. The term of lease began on May 1, 2016 and terminates on April 30, 2019 and will require Bio-Path to pay \$2,500 per month over the term of the lease. The remaining lease payments due under this lease as of June 30, 2016 are \$0.1 million.

**Drug Supplier Project Plan** - Bio-Path has a project plan agreement with a producer of the Company's drug product for the manufacture and delivery of four batches of final drug product, one of which has been delivered to the Company as of June 30, 2016 and the other three are in various stages of production. As of June 30, 2016, the remaining commitment for these batches requires the Company to pay \$0.2 million in various stages as the final product is completed and delivered. In addition, the Company has entered into an agreement with its drug substance provider for three batches of material to be used in the final drug product supplier plan with a remaining commitment totaling \$0.1 million. The amounts paid for manufacture of the Company's Grb2 drug substance and BP1001 drug product that have not been expensed totals \$0.6 million and is carried on the balance sheet as of June 30, 2016 as Prepaid Drug Product for Testing (See Note 3). Commitments to the drug substance and drug product manufacturers for manufacturing development of Bio-Path's second drug product candidate total \$0.1 million. The balance of drug supplier commitments totaling \$0.1 million is for assay development and manufacturing development.

## **10. Subsequent Event**

On June 29, 2016, the Company entered into a securities purchase agreement (the “Securities Purchase Agreement”) with certain healthcare focused institutional investors pursuant to which we agreed to sell an aggregate of 5,882,352 shares of our common stock and warrants to purchase up to 2,941,176 shares of our common stock for gross proceeds of approximately \$10.0 million. The offering closed on July 5, 2016. The net proceeds to the Company from the offering, after deducting the placement agent’s fees and expenses and our offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in the offering, was approximately \$9.3 million.

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

*When you read this Item of this Quarterly Report on Form 10-Q, it is important that you also read the unaudited financial statements and related notes included elsewhere in this Quarterly Report on Form 10-Q and our audited financial statements and notes thereto included in our Annual Report on Form 10-K as of the fiscal year ended December 31, 2015. This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations, and intentions. We use words such as "anticipate," "estimate," "plan," "project," "continuing," "ongoing," "expect," "believe," "intend," "may," "will," "should," "could," and similar expressions to identify forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the matters discussed in "Item 1A. Risk Factors" to Part I of our Annual Report on Form 10-K as of the fiscal year ended December 31, 2015, and other risks and uncertainties discussed in filings made with the SEC. See "Cautionary Note Regarding Forward-Looking Statements" in this Quarterly Report on Form 10-Q for additional discussion regarding risks associated with forward-looking statements.*

### Overview

We are a clinical and preclinical stage oncology focused antisense drug development company utilizing a novel technology that achieves systemic delivery for target specific protein inhibition for any gene product that is over-expressed in disease. Our drug delivery and antisense technology, called DNabilize™, is a platform that uses P-ethoxy, which is a deoxyribonucleic acid (DNA) backbone modification that is intended to protect the DNA from destruction by the body's enzymes when circulating *in vivo*, incorporated inside of a neutral charged lipid bilayer. We believe this combination allows for high efficiency loading of antisense DNA into non-toxic, cell-membrane-like structures for delivery of the antisense drug substance into cells. *In vivo*, the DNabilize™ delivered antisense drug substances are systemically distributed throughout the body to allow for reduction or elimination of proteins in blood diseases and solid organs.

Using DNabilize™ as a platform for drug manufacturing, we currently have two antisense drug candidates in development to treat a total of five different disease indications. Our lead drug candidate, Liposomal Grb2 ("BP1001"), targets the protein Grb2 and is preparing to enter the efficacy portion of a Phase II clinical trial for acute myeloid leukemia (AML) and the safety segment of a Phase II clinical trial for blast phase and accelerated phase chronic myelogenous leukemia (CML). BP1001 is also in preclinical studies for solid tumors, including triple negative breast cancer (TNBC) and inflammatory breast cancer (IBC).

Our second drug candidate, Liposomal Bcl2 ("BP1002"), targets the protein Bcl2, which is responsible for driving cell proliferation in up to 60% of all cancers. BP1002 is in preparation for an Investigational New Drug (IND) application.

We currently maintain an exclusive license agreement (the "License Agreement") with The University of Texas, MD Anderson Cancer Center ("MD Anderson"), under which we license from MD Anderson the delivery technology platform and BP1001 and BP1002. We are developing antisense drug candidates to treat cancer and autoimmune disorders where targeting a single protein may be advantageous and result in reduced adverse effects as compared to small molecule inhibitors with off-target and non-specific effects. We have composition of matter and method of use intellectual property for the manufacture of neutral charged DNA-liposome complexes.

On June 29, 2016, we entered into a securities purchase agreement (the "Securities Purchase Agreement") with certain healthcare focused institutional investors pursuant to which we agreed to sell an aggregate of 5,882,352 shares of our common stock and warrants to purchase up to 2,941,176 shares of our common stock for gross proceeds of approximately \$10.0 million. The offering closed on July 5, 2016. The net proceeds to the Company from the offering, after deducting the placement agent's fees and expenses and our offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in the offering, was approximately \$9.3 million.

As of June 30, 2016, we had an accumulated deficit of \$29.2 million. Our net loss was \$1.9 million and \$1.1 million for the three months ended June 30, 2016 and 2015, respectively. Our net loss was \$3.8 million and \$2.5 million for the six months ended June 30, 2016 and 2015, respectively. We expect to continue to incur significant operating losses and we anticipate that our losses may increase substantially as we expand our drug development programs and commercialization efforts. To achieve profitability, we must enter into license or development agreements with third parties, or successfully develop and obtain regulatory approval for one or more of our drug candidates and effectively commercialize any drug candidates we develop. In addition, if we obtain regulatory approval of one or more of our drug candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. There can be no assurance that we will be able to raise additional capital when needed or on terms that are favorable to us, if at all. Even if we succeed in developing and commercializing one or more of our drug candidates, we may not be able to generate sufficient revenue and we may never be able to achieve or sustain profitability.

## **Basic Technical Information**

Ribonucleic acid (RNA) is a biologically significant type of molecule consisting of a chain of nucleotide units. Each nucleotide consists of a nitrogenous base, a ribose sugar, and a phosphate. Although similar in some ways to DNA, RNA differs from DNA in a few important structural details. RNA is transcribed from DNA by enzymes called RNA polymerases and is generally further processed by other enzymes. RNA is central to protein synthesis. DNA carries the genetic information of a cell and consists of thousands of genes. Each gene serves as a recipe on how to build a protein molecule. Proteins perform important tasks for the cell functions or serve as building blocks. The flow of information from the genes determines the protein composition and thereby the functions of the cell.

The DNA is situated in the nucleus of the cell, organized into chromosomes. Every cell must contain the genetic information and the DNA is therefore duplicated before a cell divides (replication). When proteins are needed, the corresponding genes are transcribed into RNA (transcription). The RNA is first processed so that non-coding parts are removed (processing) and is then transported out of the nucleus (transport). Outside the nucleus, the proteins are built based upon the code in the RNA (translation).

Our basic drug development concept is to block the expression of proteins that cause disease. RNA is essential in the process of creating proteins. We intend to develop drugs and drug delivery systems that work by delivering short strands of DNA material (antisense DNA) that are inserted into a cell to block the production of proteins associated with disease.

Antisense DNA therapeutics is the field of designing short DNA sequences that are complementary to an RNA for a protein of interest with the intention of inhibiting the production of the targeted protein. The DNA will find the matching RNA and form a complex. The complexed RNA will not have access to the protein-making machinery, which prevents the cell from translating it into a protein. Thus, protein production is turned off and levels of the targeted protein are reduced in the cell. This gene-specific process of controlling protein expression has led to great interest in using antisense DNA to shut off the production of proteins involved in disease. Antisense therapeutics have been in development for over 20 years; however, there have been many challenges to antisense therapeutics that have prevented or reduced the successful distribution and transfer of DNA into cells. Of all delivery methods in use today, we believe only DNAbilize™ has the potential to overcome the most common challenges associated with antisense therapeutics.

## **Overview of Drug Candidates and Delivery Technology**

### ***BP1001***

BP1001 is targeted at the protein Grb2. Antisense inhibition of Grb2 interrupts the signals between mutated and activated receptors that connect to a well-known cancer associated switch called Ras protein. Inhibition of Grb2 does not cause cell death and thus does not result in adverse events typically observed with receptor inhibitors or Ras pathway inhibitors. We believe that BP1001 has the potential to be an ideal combination for any number of cancer therapeutics where the Ras pathway is aberrantly activated and patient fitness is a major concern.

We have completed our Phase I clinical trials for BP1001 for indications for AML, CML, MDS and Acute Lymphoblastic Leukemia (ALL). We are currently prioritizing our efforts on AML and CML and have begun the Phase Ib/Phase II clinical trials for these indications. Priorities for additional indications, including MDS or ALL, are expected to be addressed in the future as the results of our Phase II and work in solid tumors progresses.

### *Indications for Acute Myeloid Leukemia (AML) and Chronic Myelogenous Leukemia (CML)*

*AML – Background and Common Treatments.* AML is the rapid accumulation of immature myeloid cells in the blood, resulting in a drop of the other cell types such as red blood cells and platelets. The expansion of immature monocytes leaves the patient unable to fight infection. If AML is left untreated, it usually results in death within three months. AML incidence increases with age, with more than 50% of the cases in people age 60 or older. AML is the most common acute leukemia in adults, and the National Cancer Institute estimates that approximately 20,000 new cases occur each year. The cure rate is between 5-15% in older adults, and those who cannot receive the standard course of chemotherapy have an average survival rate of five to ten months. The standard induction therapy for AML is Cytarabine with anthracycline, which has not been improved upon for the last 20 years. The last drug approval for AML was in 1990. Of those patients who are able to receive the standard induction therapy, about 75% will likely relapse. AML is an area of high unmet need for both the relapsed and the de novo elderly population who are typically ineligible for induction therapy.

*CML – Background and Common Treatments.* CML is characterized by expansion in the blood and bone marrow of mature myeloid cells and their precursors. It can show no symptoms and is often detected during a routine blood test. If left untreated, after several years it will progress to an accelerated phase and eventually blast crisis where it becomes an acute leukemia. With the introduction of drugs such as Gleevec, the life expectancy of patients treated in the chronic phase has been significantly improved, and only 1-1.5% of patients ever go into blast crisis. However, for those patients who do progress into blast crisis, there are currently few treatment options. Myeloid cells in blast crisis have accumulated genetic abnormalities that resist traditional treatment methods that kill leukemic cells. Patients in blast crisis have an average survival rate of seven to eleven months. New treatments for this critical population are necessary.

*BP1001 Development and Treatment for AML and CML.* Our lead liposome delivered antisense drug candidate, BP1001, has been clinically tested in patients having AML, CML, MDS and ALL in a Phase I trial. During the Phase I trial, 80% of the evaluable patients had refractory or relapsed AML, having failed at least six prior therapies. In our study, 83% of patients showed decreased circulating blasts and anti-leukemic activity and eight patients stabilized for extended treatments.

#### *Phase I Clinical Trials*

The Phase I clinical trial was a dose-escalating study to determine the safety and tolerance of escalating doses of BP1001. The study determined an optimal biologically active dose for further development. The pharmacokinetics of BP1001 in patients from the study are being evaluated. In addition, patient blood samples from the trial were tested using a new assay developed by us to measure down-regulation of the target protein, the critical scientific data that demonstrated the delivery technology does in fact successfully deliver the antisense drug substance to the cell and across the cell membrane into the interior of the cell where expression of the target protein is blocked. The clinical trial was conducted at MD Anderson.

The original IND granted by the U.S. Food and Drug Administration (FDA) in March 2010 allowed us to proceed with a Phase I clinical trial having five cohorts culminating in a maximum dose of 50 mg/m<sup>2</sup>. However, in November 2012, we announced that since there had been no evidence of significant toxicity from treatment of patients with BP1001, we requested the FDA to allow higher dosing in patients. The principal investigator for the clinical trial, in consultation with our management team, advised us that with the absence of any real toxicity barriers, we should continue to evaluate higher doses of BP1001. The absence of significant toxicity provided a significant opportunity for us to test higher doses in patients in order to find a dose that provides maximum potential benefit and duration of anti-leukemia effect. These actions were approved and a revised protocol was submitted allowing higher dosing. We announced in October 2014 that we completed Cohort 6, successfully treating three patients at a dose 90 mg/m<sup>2</sup>. There has been no evidence of significant toxicity from treatment of patients with BP1001 in our Phase I clinical trial.

An important outcome for the Phase I clinical trial is the ability to assess for the first time the performance of our delivery technology platform in human patients. We have developed two new assays to be able to provide scientific proof of concept of the delivery technology. The first involves a novel detection method for the drug substance in blood samples that will be used to assess the pharmacokinetics of the drug. The second involves a method to measure down-regulation of the target protein in a patient blood sample that was achieved. The latter measurement will provide critical proof that DNAbilize™ neutral liposome delivery technology delivered the drug substance to the cell and was able to transport it across the cell membrane into the interior to block cellular production of the Grb2 protein.

In this regard, in August 2013 we announced that our DNAbilize™ liposomal delivery technology achieved a major milestone in the development of antisense therapeutics based on a scientific assay confirming that treating patients with our drug candidate BP1001 inhibits the Grb2 disease-causing target protein in patients with blood cancers. Inhibition of the disease-causing protein has the effect of down regulating the disease. This will allow for BP1001 to be used potentially in combination with current frontline treatments. This discovery also points to the potential use of a liposomal antisense treatment as a standalone treatment to transform and manage a disease that has a disease-causing protein as a chronic disorder. This accomplishment is a potentially significant breakthrough for antisense therapeutics, whose development, to date, as a class of therapeutics has been severely limited by a lack of a systemic delivery mechanism that can safely distribute the drug throughout the body and deliver the antisense drug substance across the cell membrane into the interior of the cell. Further, we expect that scientific proof of principle for DNAbilize™ may lead to licensing and business development opportunities, supporting our business model.

The principal investigator for the Phase I clinical trial is a leading expert in the treatment of CML, AML, MDS and ALL. Because the results of the first trial produced unexpected and clinically interesting results in some patients, the principal investigator prepared an abstract of the results of the first cohort that was accepted for presentation at the American Society of Hematology (ASH) annual meeting in December 2011. Results that demonstrated potential anti-leukemia benefits in treated patients were included in the presentation. Subsequently, in 2013 the principal investigator prepared an abstract of updated information on the results of the clinical trial through Cohort 5, which was accepted for presentation at the ASH annual meeting in December 2013. Highlights (which have been updated to include patients from Cohort 6) of the presentation prepared by the principal investigator for the meeting included:

*Data from the Phase I Clinical Trial*

- Among 20 evaluable patients, 15 demonstrated anti-leukemia activity with reduction in peripheral or bone marrow blasts from baseline.
- Five patients demonstrated transient improvement and/or stable disease, three of whom received a total of five cycles each.
- Two patients, in addition to achieving market blast percentage declines, also experienced transient improvements in leukemia cutis lesions.

*Disease Stabilization in MDS and AML*

- Two patients with MDS, a 53-year-old male and a 72-year-old female, both achieved disease stabilization and continued therapy for five cycles before disease progression.
- A 54-year-old HIV positive male with AML achieved stable disease and marked reduction in peripheral blasts, continuing therapy for five cycles before disease progression.

*Experience in CML-Blast Phase*

- Patient with myeloid blast crisis of CML.
- Prior therapies consisted of: imatinib, dasatinib, nilotinib, DCC-2036, Cytarabine + Fludarabine + Dasatinib + Gemtuzumab, PHA-739358, Clofarabine + Dasatinib.
- Upon start of BP1001, patient showed a significant reduction in blasts from 81% to 5%, but due to leptomeningeal disease progression discontinued therapy before full cycle.

*Inhibition of Target Grb2 Protein*

- Grb2 levels were compared to baseline prior to treatment.
- By end of treatment, BP1001 decreased Grb2 in 11 out of 13 samples (85%) tested (average reduction 50%).

The Phase I clinical trial is typically ended when a maximum tolerated dose (MTD) is encountered. However, due to the lack of toxicity of the drug, a MTD was not observed. As a result, an optimal biological dose was determined and we completed Cohort 6 of our Phase I clinical trial. It is noted, however, that the lack of toxicity is a major advantage for the drug candidate BP1001 since it allows higher levels of drug to be administered to the patient, increasing the potential therapeutic benefit.

In April 2015, we received orphan drug designation by the FDA for BP1001 in AML. Orphan drug status provides Bio-Path with seven years of exclusivity after receiving formal marketing approval, as well as additional development incentives. The FDA grants this designation to certain drugs that target diseases affecting fewer than 200,000 people in the United States.

### *Phase II Clinical Trials*

On February 9, 2015, we announced that we began enrollment into the combination therapy Phase Ib clinical trial, the safety segment of the Phase II clinical trial, for BP1001 in patients with AML. The combination therapy Phase Ib clinical trial consisted of two dosing cohorts of BP1001 (60 mg/m<sup>2</sup> and 90 mg/m<sup>2</sup>) to test the safety profile of treating AML patients with BP1001 in combination with low dose Ara C (LDAC). Patients ineligible for intensive induction therapy are currently treated only with LDAC. We recently announced the completion of the Phase Ib trial. Results from the Phase Ib clinical trial demonstrated it is safe to add BP1001, which appears to yield better response rates in this AML patient population. Following the safety portion, the trial is expected to be opened in multiple centers to test 54 patients with the combination. An interim analysis is expected to be performed after 19 patients have been treated with the combination therapy.

On October 9, 2015, we announced the completion of Cohort 7, the first dosing cohort of the Phase Ib clinical trial, consisting of a 60 mg/m<sup>2</sup> dose of BP1001 in combination with LDAC. On March 3, 2016, we announced the completion of Cohort 8, the second dosing cohort of the Phase Ib clinical trial, consisting of a 90 mg/m<sup>2</sup> dose of BP1001 in combination with LDAC. On June 6, 2016, we announced that three of the six evaluable patients in Cohorts 7 and 8 achieved complete remission and two achieved partial remission.

Development of new therapeutics for AML and CML in blast crisis can meet currently unmet needs for patients who have very few treatment options due to age, fitness or treatment-resistance of advanced genetically unstable cells. Elderly patients unfit to receive a stem cell transplant or induction therapy face a likelihood of relapse to a more resistant leukemia for which current drug products are not effective. BP1001 and DNAbilize™ technology offer new hope for achieving remission for fragile populations. We believe that the combination of BP1001 with frontline chemotherapy can provide a way to treat cancer without added toxicity so that the patient can remain under treatment long enough to reach complete remission.

### *Indications for Triple Negative Breast Cancer (TNBC) and Inflammatory Breast Cancer (IBC)*

*TNBC and IBC – Background and Common Treatments.* Approximately 15 to 20% of breast cancers fall into the category of triple-negative. TNBC tumors do not express estrogen receptors, progesterone receptors and low human epidermal growth factor receptor 2 (HER2). These negative results mean that the growth of the cancer is not supported by the hormones estrogen and progesterone, or by the presence of HER2 receptors. Therefore, TNBC does not respond to hormonal therapy or therapies that target HER2 receptors. In addition, TNBC tumors are very aggressive. IBC often presents as TNBC and is a rare and very aggressive disease in which cancer cells block lymph vessels in the skin of the breast. This type of breast cancer is called “inflammatory” because the breast often looks swollen and red, or “inflamed.” IBC accounts for 2 to 5% of all breast cancers. IBC tumors are very aggressive and are frequently hormone receptor negative, which means hormone therapies may not be effective. The five-year survival rate for IBC is approximately 40% versus approximately 87% for all breast cancers combined, making IBC a priority area for development of new treatments. The current treatment regimen includes radiation, chemotherapy and surgery. A lack of targeted treatments for these types of breast cancer has led to development of new therapeutics currently in clinical trials. Because of the aggressiveness of these cancers, a systemic treatment is needed. BP1001 represents a systemic treatment that targets an important pathway for TNBC and IBC cell growth and has potential to be integral for the treatment of these diseases.

*BP1001 Development and Treatment for TNBC and IBC.* In July 2013, we announced that we were initiating preclinical testing of BP1001 for TNBC and IBC. Our plan is to develop BP1001 as a targeted therapy against TNBC and IBC. Our treatment goals are two-pronged: the first is to develop BP1001 as a tumor reduction agent in combination with other approved drugs in preoperative settings for TNBC and IBC patients, and the second is to develop BP1001 as a drug to treat and control or eliminate cancer metastasis in TNBC and IBC patients. Both of these treatment goals address high need situations for patients. Once the preclinical studies are completed, we believe that the observations that we learned from the original Phase I trial will help us increase the speed of progress for such Phase I trial in TNBC and IBC, as the toxicity profile of BP1001 is currently well-established.

*Indications for Other Solid Tumors (e.g., Lymphoma, Colon, Thyroid, and Head and Neck Cancers)*

Cancers of colon, thyroid, head and neck, and lymphoma are solid tumors which utilize the same signaling pathway as TNBC and IBC, which involve the Grb2 protein. It has been proposed that BP1001 may have clinical efficacy in these indications due to the overlapping similarity of the mechanisms of their growth and proliferation. As our program for BP1001 continues to develop, it is anticipated that these indications will be assessed in preclinical research.

**BP1002**

BP1002, also known by its scientific name as Liposomal Bcl2, is our second liposome delivered antisense drug candidate. BP1002 is intended to target the lymphoma and certain solid tumor markets. Clinical targets for BP1002 include lymphoma, breast cancer, colon cancer, prostate cancer and leukemia. We believe that BP1002 has the potential to treat 40 to 60% of solid tumors.

Bcl2 is a protein that is involved in regulating apoptosis, or programmed cell death. Apoptosis is a physiologic mechanism of cell turnover by which cells actively commit suicide in response to aberrant external signals. Over-expression of Bcl2 prevents the induction of apoptosis in response to cellular insults such as treatment with chemotherapeutic agents. Bcl2 is over-expressed in more than 90% of follicular B-cell non-Hodgkin's lymphoma due to a chromosomal rearrangement and is the key factor in the initiation of this malignancy. Bcl2 is also overexpressed in a wide variety of solid tumors (it is estimated to be over-expressed in 40% of cancers). For example, Bcl2 over-expression has been associated with the progression of prostate cancer from hormone dependence to hormone independence and may contribute to the relative drug resistant phenotype typically observed in hormone independent prostate cancer.

*Non-Hodgkin's Lymphomas –Background and Common Treatments.* There are 56,000 new cases of non-Hodgkin's lymphoma (NHL) per year, with approximately 30% being follicular lymphoma (FL) and approximately 60% being the more aggressive diffuse large B cell lymphoma (DLBCL) type. A consensus on front-line treatment for FL has not been established as many factors are taken into account in the treatment approach (e.g., age, stage of disease, cell surface markers). Rituximab is a treatment of choice for the majority of lymphomas and is typically used in combination with other chemotherapy agents or as a maintenance treatment.

*BP1002 – Development and Treatment for FL, DLBCL, MALT, MCL AND BL.* On December 22, 2014, we announced that we initiated development of BP1002 as a treatment for FL. We intend to file a new IND to begin clinical testing of BP1002 in patients with multiple types of lymphoma. We anticipate that the Phase I trial will be open to refractory and relapsed patients with FL and other sub-types of NHL, including DLBCL, mucosa-associated lymphoid tissue (MALT), mantle cell lymphoma (MCL) and Burkitt's lymphoma (BL).

Treatments of varying efficacy exist for FL and DLBCL; however, due to the wide variety of subtypes of this disease, a frontline approach is lacking. Bcl2 is over-expressed in 85% of patients due to a translocation between chromosomes 18 and 14, a hallmark of the disease. Therapies that directly and specifically block or inhibit protein synthesis of Bcl2 could be transformative in this indication. Toxicity in competing therapeutics using small molecule inhibitors of Bcl2 occurs due to non-specificity of the inhibitors. Bcl2 is part of a large family of proteins. Small molecule inhibitors developed against it typically bind to more than one member of the family. This leads to unexpected off-target adverse effects. A previous attempt at a Bcl2 antisense by Genta Inc. failed to show an improvement in remission or overall survival rates. This antisense was a phosphorothioate DNA with dose-limiting toxicity and it also did not have a lipid delivery mechanism to aid in prevention of clearance by the liver, reducing the levels of antisense reaching diseased cells. We believe that BP1002 overcomes the failures of previous attempts at inhibiting Bcl2 by specifically interrupting the protein expression of one protein and not a family of necessary proteins and does so without inherent toxicity. With BP1002, more drug substance can reach the circulating lymphocytes so that the cancer cells can be treated with a therapeutically relevant dose. We believe BP1002 provides a new tool for cancer treatment for not just lymphomas, but also many cancers for which Bcl2 expression is driving cell proliferation. The introduction of a new, non-toxic, and specific Bcl2 inhibitor could be a major advance in cancer therapeutics.

## ***DNabilize™***

DNabilize™ technology is available for out-licensing. We intend to apply our drug delivery technology template to new disease-causing protein targets as a means to develop new liposomal antisense drug candidates. A new product identification template was recently approved that defines a process of scientific, preclinical, commercial and intellectual property evaluation of potential new drug candidates for inclusion into our drug product development pipeline. A significant amount of capital is expected to be allocated to in-license promising protein targets that can be developed as new liposomal antisense drug candidates. As we expand, we will look at indications where a systemic delivery is needed and antisense can be used to slow, reverse, or cure a disease, either alone or in combination with another drug.

We are interested in pursuing a wide-ranging, proactive licensing program to include co-development of specific liposomal antisense drug candidates, sub-licensing our delivery template for outside development of liposomal antisense drug candidates or out-licensing a partially-developed drug candidate for final development and marketing.

## **Company History and Available Information**

We were originally incorporated in May 2000 as a Utah corporation under the name Ogden Golf Co. Corporation, but terminated our retail golf store operations in December 2006. In February 2008, we completed a reverse merger with Bio-Path Subsidiary. The name of Ogden Golf Co. Corporation was changed to Bio-Path Holdings, Inc. and the directors and officers of Bio-Path Subsidiary became the directors and officers of Bio-Path Holdings, Inc. On March 10, 2014, our common stock ceased trading on the OTCQX and commenced trading on the NASDAQ Capital Market under the ticker symbol “BPTH.” Effective December 31, 2014, we changed our state of incorporation from Utah to Delaware through a statutory conversion pursuant to the Utah Revised Business Corporation Act and the Delaware General Corporation Law. Our principal executive offices are located at 4710 Bellaire Boulevard, Suite 210, Bellaire, Texas 77401, and our telephone number is (832) 742-1357.

## **Recent Accounting Pronouncements**

See Note 2 to the Unaudited Consolidated Financial Statements for a discussion of the impact of a new accounting standards update on the Company’s consolidated financial statements.

## **Financial Operations Overview**

### ***Revenue***

To date, we have not generated any revenues. Our ability to generate revenues from our drug candidates, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our drug candidates.

### ***Research and development expenses***

Research and development expenses consist of costs associated with our research activities, including the development of our drug candidates. Our research and development expenses consist of:

- expenses related to research and development personnel, including salaries, benefits, travel and stock-based compensation;
- external research and development expenses incurred under arrangements with third parties, such as contract research organizations, clinical sites, manufacturing organizations and consultants;

- license fees, including maintenance fees and patent expense paid to MD Anderson in connection with the License Agreement; and
- costs of materials used during research and development activities.

Costs and expenses that can be clearly identified as research and development are charged to expense as incurred in accordance with generally accepted accounting policies (“GAAP”). Advance payments, including nonrefundable amounts, for goods or services that will be used or rendered for future research and development activities are deferred and capitalized. Such amounts will be recognized as an expense as the related goods are delivered or the related services are performed. If the goods will not be delivered, or services will not be rendered, then the capitalized advance payment is charged to expense.

We expect research and development expenses associated with the completion of the associated clinical trials to be substantial and to increase over time. The successful development of our drug candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete development of our drug candidates or the period, if any, in which material net cash inflows from our drug candidates may commence. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- the rate of progress, results and costs of completion of ongoing clinical trials of our drug candidates;
- the size, scope, rate of progress, results and costs of completion of any potential future clinical trials and preclinical trials of our drug candidates that we may initiate;
- competing technological and market developments;
- the performance of third-party manufacturers and suppliers;
- the ability of our drug candidates, if they receive regulatory approval, to achieve market success; and
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our drug candidates.

A change in the outcome of any of these variables with respect to the development of a drug candidate could mean a significant change in the costs and timing associated with the development of that drug candidate. For example, if the FDA or other regulatory authority were to require us to conduct clinical trials beyond those which we currently anticipate will be required for the completion of clinical development of a drug candidate or if we experience significant delays in enrollment in any clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development.

#### ***General and administrative expenses***

Our general and administrative expenses consist primarily of salaries and benefits for management and administrative personnel, professional fees for legal, accounting and other services, travel costs and facility-related costs such as rent, utilities and other general office expenses.

## Results of Operations

### Comparisons of the Three Months Ended June 30, 2016 to the Three Months Ended June 30, 2015

*Research and Development Expense.* Our research and development expense was \$1.2 million for the three months ended June 30, 2016, an increase of \$0.6 million compared to the three months ended June 30, 2015. The increase in research and development expense was primarily due to the release of drug material in preparation for our Phase II clinical trial for BP1001 in AML and increased salaries and benefits expense. The following table sets forth our research and development expenses (in thousands):

	Three Months Ended June 30,	
	2016	2015
Research and development expense	\$ 1,092	\$ 532
Non-cash stock-based compensation expense	95	32
Total research and development expense	<u>\$ 1,187</u>	<u>\$ 564</u>

*General and Administrative Expense.* Our general and administrative expense for the three months ended June 30, 2016 was \$0.8 million, an increase of \$0.2 million compared to the three months ended June 30, 2015. The increase in general and administrative expense was primarily due to increased legal fees, stock-based compensation and salaries and benefits expense. The following table sets forth our general and administrative expenses (in thousands):

	Three Months Ended June 30,	
	2016	2015
General and administrative expense	\$ 629	\$ 506
Non-cash stock-based compensation expense	128	61
Total general and administrative expense	<u>\$ 757</u>	<u>\$ 567</u>

*Net Loss.* Our net loss for the three months ended June 30, 2016 was \$1.9 million, an increase of \$0.8 million compared the three months ended June 30, 2015. Net loss per share, both basic and diluted, was \$0.02 per share for the three months ended June 30, 2016 compared to \$0.01 per share for the three months ended June 30, 2015.

### Comparisons of the Six Months Ended June 30, 2016 to the Six Months Ended June 30, 2015

*Research and Development Expense.* Our research and development expense was \$2.2 million for the six months ended June 30, 2016, an increase of \$1.1 million compared to the six months ended June 30, 2015. The increase in research and development expense was primarily due to the release of drug material in preparation for our Phase II clinical trial for BP1001 in AML and increased salaries and benefits expense. The following table sets forth our research and development expenses (in thousands):

	Six Months Ended June 30,	
	2016	2015
Research and development expense	\$ 2,070	\$ 1,096
Non-cash stock-based compensation expense	137	61
Total research and development expense	<u>\$ 2,207</u>	<u>\$ 1,157</u>

*General and Administrative Expense.* Our general and administrative expense for the six months ended June 30, 2016 was \$1.6 million, an increase of \$0.3 million compared to the six months ended June 30, 2015. The increase in general and administrative expense was primarily due to increased legal fees, stock-based compensation and salaries and benefits expense. The following table sets forth our general and administrative expenses (in thousands):

	Six Months Ended June 30,	
	2016	2015
General and administrative expense	\$ 1,425	\$ 1,230
Non-cash stock-based compensation expense	181	123
Total general and administrative expense	<u>\$ 1,606</u>	<u>\$ 1,353</u>

*Net Loss.* Our net loss for the six months ended June 30, 2016 was \$3.8 million, an increase of \$1.3 million compared the six months ended June 30, 2015. Net loss per share, both basic and diluted, was \$0.04 per share for the six months ended June 30, 2016 compared to \$0.03 per share for the six months ended June 30, 2015.

## **Liquidity and Capital Resources**

### ***Overview***

To date, we have not generated any revenues. Since our inception, we have funded our operations primarily through public and private offerings of our capital stock and other securities. We expect to finance our foreseeable cash requirements through cash on hand, cash from operations, debt financings and public or private equity offerings. Additionally, we may seek collaborations and license arrangements for our drug candidates. We may seek to access the public or private equity markets whenever conditions are favorable. We currently have no lines of credit or other arranged access to debt financing.

We had a cash balance of \$4.2 million as of June 30, 2016 compared to a cash balance of \$8.9 million as of December 31, 2015. We believe that our available cash at June 30, 2016, together with the net proceeds from the registered direct offering, as described below, will be sufficient to fund our liquidity and capital expenditure requirements for at least the next 12 months.

### ***Cash Flows***

*Operating Activities.* Net cash used in operating activities for the six months ended June 30, 2016 was \$4.6 million. Net cash used in operating activities consisted primarily of the net loss for the period of \$3.8 million, an increase in other current assets of \$1.1 million and a decrease in current liabilities of \$0.1 million. These are partially offset by non-cash stock-based compensation expense of \$0.3 million and technology license amortization and fixed asset depreciation expenses of \$0.1 million.

### ***2014 Shelf Registration***

On November 5, 2013, we filed a shelf registration statement on Form S-3 with the SEC, which was declared effective by the SEC on January 13, 2014 (the “Shelf Registration Statement”). The Shelf Registration Statement was filed to register the offering and sale of up to \$100.0 million of our common stock, preferred stock, warrants to purchase common stock or preferred stock or any combination thereof, either individually or in units. The foregoing does not constitute an offer to sell or the solicitation of an offer to buy securities, and shall not constitute an offer, solicitation or sale in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of that jurisdiction.

### ***“At the Market” Offering***

On June 24, 2015, we entered into a Controlled Equity Offering<sup>SM</sup> Sales Agreement (the “Sales Agreement”) with Cantor Fitzgerald & Co. (“Cantor Fitzgerald”), as sales agent, pursuant to which we may offer and sell, from time to time, through Cantor Fitzgerald shares of our common stock. Sales of shares of common stock under the Sales Agreement will be made pursuant to the Shelf Registration Statement and a related prospectus supplement filed with the SEC on June 25, 2015, for an aggregate offering price of up to \$25.0 million. Under the Sales Agreement, Cantor Fitzgerald may sell shares by any method deemed to be an “at the market” offering as defined in Rule 415 under the Securities Act or any other method permitted by law, including in privately negotiated transactions. We will pay Cantor Fitzgerald a commission of 3.4% of the aggregate gross proceeds from each sale of shares under the Sales Agreement and have agreed to provide Cantor Fitzgerald with customary indemnification and contribution rights. We have also agreed to reimburse Cantor Fitzgerald for certain specified expenses. Pursuant to the Securities Purchase Agreement, we are subject to certain restrictions on our ability to offer and sell shares of our common stock under the Sales Agreement. As of June 30, 2016, we have not offered or sold any shares of common stock under the Sales Agreement.

### ***Registered Direct Offering***

On June 29, 2016, we entered into the Securities Purchase Agreement with certain healthcare focused institutional investors pursuant to which we agreed to sell an aggregate of 5,882,352 shares of our common stock and warrants to purchase up to 2,941,176 shares of our common stock for gross proceeds of approximately \$10.0 million. The offering closed on July 5, 2016. The net proceeds to the Company from the offering, after deducting the placement agent's fees and expenses and our offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in the offering, was approximately \$9.3 million.

### ***Future Capital Requirements***

We expect to continue to incur significant operating expenses in connection with our ongoing activities, including conducting clinical trials, manufacturing and seeking regulatory approval of our drug candidates, BP1001 and BP1002. Accordingly, we will continue to require substantial additional capital to fund our projected operating requirements. Such additional capital may not be available when needed or on terms favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current and future operating plan. There can be no assurance that we will be able to continue to raise additional capital through the sale of our securities in the future. Our future capital requirements may change and will depend on numerous factors, which are discussed in detail in "Item 1A. Risk Factors" to Part I of our Annual Report on Form 10-K as of the fiscal year ended December 31, 2015.

### **Off-Balance Sheet Arrangements**

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

### **Critical Accounting Policies**

The preparation of financial statements in conformity with GAAP in the United States has required the management of the Company to make assumptions, estimates and judgments that affect the amounts reported in the financial statements, including the notes thereto, and related disclosures of commitments and contingencies, if any. We consider our critical accounting policies to be those that require the more significant judgments and estimates in the preparation of financial statements. Our significant accounting policies are discussed in Note 2 to our consolidated financial statements included in our Annual Report on Form 10-K as of the year ended December 31, 2015.

### **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

***Interest Rate Risk.*** We had cash and cash equivalents of approximately \$4.2 million as of June 30, 2016. Although this cash account is subject to fluctuations in interest rates and market conditions, no significant gain or loss on this account is expected to be recognized in earnings. We do not invest in derivative securities.

***Capital Market Risk.*** We currently have no product revenues and depend on funds raised through other sources. One source of funding is through future debt or equity offerings. Our ability to raise funds in this manner depends upon capital market forces affecting our stock price.

### **ITEM 4. CONTROLS AND PROCEDURES**

#### **Evaluation of Disclosure Controls and Procedures**

It is management's responsibility to establish and maintain adequate disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Disclosure controls and procedures are controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the company's principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

Our management, including our Chief Executive Officer (who is also our Chief Financial Officer), has reviewed and evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this Quarterly Report on Form 10-Q. Following this review and evaluation, our management determined that as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and is accumulated and communicated to management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## **PART II - OTHER INFORMATION**

### **ITEM 1. LEGAL PROCEEDINGS**

None.

### **ITEM 1A. RISK FACTORS**

There were no material changes from the risk factors previously disclosed under “Item 1A. Risk Factors” to Part I of our Annual Report on Form 10-K as of the fiscal year ended December 31, 2015.

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

None.

### **ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

### **ITEM 4. MINE SAFETY DISCLOSURES**

None.

### **ITEM 5. OTHER INFORMATION**

None.

### **ITEM 6. EXHIBITS**

<u>Exhibit No.</u>	<u>Description of Exhibit</u>
2.1	Agreement and Plan of Merger and Reorganization dated September 27, 2007, by and among the Company, Biopath Acquisition Corp., a Utah corporation and wholly owned subsidiary of the registrant, and Bio-Path, Inc., a Utah corporation (incorporated by reference to Exhibit 2.1 to the Company’s Current Report on Form 8-K filed on September 27, 2007).
3.1	Certificate of Incorporation (incorporated by reference to Exhibit 3.3 to the Company’s Current Report on Form 8-K filed on January 6, 2015).

3.2	Bylaws (incorporated by reference to Exhibit 3.4 to the Company's Current Report on Form 8-K filed on January 6, 2015).
3.3	Articles of Merger relating to the merger of Biopath Acquisition Corp. with and into Bio-Path, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 19, 2008).
3.4	Certificate of Conversion (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on January 6, 2015).
3.5	Articles of Transfer (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on January 6, 2015).
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K filed on March 16, 2015).
4.2	Warrant Agreement, dated April 25, 2008, by and between the Company and Randeep Suneja, M.D. (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K filed on March 31, 2014).
4.3	Form of Warrant issued to Maxim Group LLC, Sabby Healthcare Volatility Master Fund, Ltd. and Sabby Volatility Warrant Master Fund, Ltd. (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 21, 2014).
4.4	Form of Warrant issued to certain investors (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on June 29, 2016).
4.5*	Form of Warrant issued to H.C. Wainwright & Co., LLC and certain of its designees.
10.1	Form of Securities Purchase Agreement by and between the Company and certain investors (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 29, 2016).
31*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 Sarbanes Oxley Act of 2002.
32*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

\* Filed herewith.

**SIGNATURE**

In accordance with the requirements of the Exchange Act, the Company has caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned thereunto duly authorized.

Dated: August 9, 2016

BIO-PATH HOLDINGS, INC.

By /s/ Peter H. Nielsen  
Peter H. Nielsen  
President  
Chief Executive Officer  
(Principal Executive Officer)  
Chief Financial Officer  
(Principal Financial Officer)

## EXHIBIT INDEX

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\* Filed herewith.

NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

**COMMON STOCK PURCHASE WARRANT**

**BIO-PATH HOLDINGS, INC.**

Warrant Shares: \_\_\_\_\_

Initial Exercise Date: January \_\_, 2017

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, \_\_\_\_\_ or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date that is six (6) months after the date hereof (the "Initial Exercise Date") and on or prior to the close of business on the five (5) year anniversary of the Initial Exercise Date (the "Termination Date") but not thereafter, to subscribe for and purchase from Bio-Path Holdings, Inc., a Delaware corporation (the "Company"), up to \_\_\_\_\_ shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated June 29, 2016, among the Company and the purchasers signatory thereto.

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Section 2. Exercise.

a) Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company (or such other office or agency of the Company as it may designate by notice in writing to the registered Holder at the address of the Holder appearing on the books of the Company) of a duly executed facsimile copy (or e-mail attachment) of the Notice of Exercise in the form annexed hereto. Within three (3) Trading Days following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) below is available and is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. **The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The exercise price per share of the Common Stock under this Warrant shall be \$2.46, subject to adjustment hereunder (the "Exercise Price").

c) Cashless Exercise. If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of, the Warrant Shares to the Holder, then this Warrant may be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

- (A) = the last VWAP immediately preceding the time of delivery of the Notice of Exercise giving rise to the applicable "cashless exercise", as set forth in the applicable Notice of Exercise (to clarify, the "last VWAP" will be the last VWAP as calculated over an entire Trading Day such that, in the event that this Warrant is exercised at a time that the Trading Market is open, the prior Trading Day's VWAP shall be used in this calculation);
- (B) = the Exercise Price of this Warrant, as adjusted hereunder; and
- (X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the characteristics of the Warrants being exercised, and the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the OTCQB or OTCQX, as applicable, (c) if the Common Stock is not then listed or quoted for trading on the OTC Bulletin Board and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Purchasers of a majority in interest of the Securities then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“DWAC”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by Holder (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144, or (C) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is one (1) Trading Day after the delivery to the Company of the Notice of Exercise (such date, the “Warrant Share Delivery Date”). Upon delivery of the Notice of Exercise the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares; provided payment of the aggregate Exercise Price (other than in the case of a Cashless Exercise) is received within three Trading Days of delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth Trading Day after such liquidated damages begin to accrue) for each Trading Day following such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable.

ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise pursuant to the terms hereof (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall, at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price or round up to the next whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that, in the event Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the prior or contemporaneous payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties"), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13 (d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13 (d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination and shall have no liability for exercises of the Warrant that are not in compliance with the Beneficial Ownership Limitation, except to the extent the Holder relies on the number of outstanding shares of Common Stock that was provided by the Company. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, and the Company shall have no obligation to verify or confirm the accuracy of such determination and shall have no liability for exercises of the Warrant that are not in compliance with the Beneficial Ownership Limitation, except to the extent the Holder relies on the number of outstanding shares of Common Stock that was provided by the Company. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written request of a Holder, the Company shall within two Trading Days confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) [RESERVED]

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction other than one in which a Successor Entity (as defined below) that is a publicly traded corporation whose stock is quoted or listed on a Trading Market assumes this Warrant such that the Warrant shall be exercisable for the publicly traded Common Stock of such Successor Entity, the Company or any Successor Entity (as defined below) shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction, purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds within five Business Days of the Holder's election (or, if later, on the effective date of the Fundamental Transaction). "Black Scholes Value" means the value of this Warrant based on the Black and Scholes Option Pricing Model obtained from the "OV" function on Bloomberg, L.P. ("Bloomberg") determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable Fundamental Transaction and the Termination Date. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for, the Company (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and the Successor Entity may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If while the Warrant is outstanding (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last by facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date the Holder delivers an assignment form to the Company assigning this Warrant full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the initial issuance date of this Warrant and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of executing stock certificates to execute and issue the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Purchase Agreement.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant or the Purchase Agreement, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holder by the Company shall be delivered in accordance with the notice provisions of the Purchase Agreement.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

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(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**BIO-PATH HOLDINGS, INC.**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**NOTICE OF EXERCISE**

TO: BIO-PATH HOLDINGS, INC.

(1) The undersigned hereby elects to purchase \_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States; or

if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

The Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

*Signature of Authorized Signatory of Investing Entity:* \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

**ASSIGNMENT FORM**

*(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)*

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Date: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

**CERTIFICATION OF  
PRINCIPAL EXECUTIVE OFFICER AND  
PRINCIPAL FINANCIAL OFFICER**

I, Peter H. Nielsen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bio-Path Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. I am responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me by others within those entities, particularly during the period in which this report is being prepared; and
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under my supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2016

By: /s/ Peter H. Nielsen  
Peter H. Nielsen  
Chief Executive Officer  
(Principal Executive Officer)  
Chief Financial Officer  
(Principal Financial Officer)

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**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Bio-Path Holdings, Inc. (the "Company") for the quarter ended June 30, 2016 as filed with the Securities and Exchange Commission (the "Report"), I, Peter H. Nielsen, Chief Executive Officer and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 9, 2016

By: /s/ Peter H. Nielsen  
Peter H. Nielsen  
Chief Executive Officer  
Chief Financial Officer

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