

# HEAT BIOLOGICS, INC.

## FORM 424B3

(Prospectus filed pursuant to Rule 424(b)(3))

Filed 05/26/16

Address	801 CAPITOLA DRIVE DURHAM, NC 27713
Telephone	919-240-7133
CIK	0001476963
Symbol	HTBX
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Drugs
Sector	Healthcare
Fiscal Year	12/31

**HEAT BIOLOGICS, INC.**

**9,100,000 Shares of Common Stock  
Warrants to Purchase Up to 6,825,000 Shares of Common Stock**



This prospectus supplement amends and supplements our prospectus, dated March 18, 2016, (the “Prospectus”), relating to the offering of 9,100,000 shares of common stock of Heat Biologics, Inc. and warrants to purchase 6,825,000 shares of our common stock that were issued in our public offering that closed on March 23, 2016. Each warrant has an exercise price of \$1.00 per share, is immediately exercisable and expires on the fifth anniversary of the original issuance date.

Our common stock is listed on the NASDAQ Capital Market under the symbol “HTBX.” On May 25, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was \$0.60 per share. There is no established trading market for the warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the warrants will be limited.

We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”) and, as such, have elected to comply with certain reduced public company reporting requirements. See “Prospectus Summary—Implications of Being an Emerging Growth Company” in the Prospectus.

This prospectus supplement is being filed to include the information set forth in our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2016 filed on May 11, 2016, which is set forth below.

This prospectus supplement should be read in conjunction with the Prospectus. This prospectus supplement updates, amends and supplements the information included or incorporated by reference in the Prospectus. If there is any inconsistency between the information in the Prospectus and this prospectus supplement, you should rely on the information in this prospectus supplement.

**Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 4 of the Prospectus for more information.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the Prospectus to which it relates is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement No. 6 is May 26, 2016.

**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 March 31, 2016

OR

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 001-35994

**Heat Biologics, Inc.**

*(Exact name of registrant as specified in its charter)*

**Delaware**  
*(State or other jurisdiction of  
Incorporation or Organization)*

**26-2844103**  
*(I.R.S. Employer  
Identification No.)*

**801 Capitola Drive**  
**Durham, NC**  
*(Address of principal executive offices)*

**27713**  
*(Zip Code)*

**(919) 240-7133**

*(Registrant's telephone number, including area code)*

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

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

(Do not check if 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

As of May 11, 2016 there were 17,524,641 shares of Common Stock, \$0.0002 par value per share, outstanding.

HEAT BIOLOGICS, INC.

TABLE OF CONTENTS

	<u>Page No.</u>
<b>PART I — FINANCIAL INFORMATION</b>	
<u>Item 1.</u> <u>Financial Statements</u>	1
<u>Consolidated Balance Sheets as of March 31, 2016 (unaudited) and December 31, 2015</u>	1
<u>Consolidated Statements of Operations and Comprehensive Loss (unaudited) for the three months ended March 31, 2016 and March 31, 2015</u>	2
<u>Consolidated Statements of Stockholders' Equity (unaudited) for the three months ended March 31, 2016</u>	3
<u>Consolidated Statements of Cash Flows (unaudited) for the three months ended March 31, 2016 and March 31, 2015</u>	4
<u>Notes to the Consolidated Financial Statements (unaudited)</u>	5
<u>Item 2.</u> <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	14
<u>Item 3.</u> <u>Quantitative and Qualitative Disclosures About Market Risk</u>	20
<u>Item 4.</u> <u>Controls and Procedures</u>	20
<b>PART II—OTHER INFORMATION</b>	
<u>Item 1.</u> <u>Legal Proceedings</u>	21
<u>Item 1A.</u> <u>Risk Factors</u>	21
<u>Item 2.</u> <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	23
<u>Item 3.</u> <u>Defaults Upon Senior Securities</u>	23
<u>Item 4.</u> <u>Mine Safety Disclosures</u>	23
<u>Item 5.</u> <u>Other Information</u>	23
<u>Item 6.</u> <u>Exhibits</u>	23
<u>SIGNATURES</u>	24

## 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”). All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are not guarantees of future performance and our actual results could differ materially from the results discussed in the forward-looking statements. Factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, our ability to raise additional capital to support our clinical development program and other operations, our ability to develop products of commercial value and to identify, discover and obtain rights to additional potential product candidates, our ability to protect and maintain our intellectual property and the ability of our licensors to obtain and maintain patent protection for the technology or products that we license from them, the outcome of research and development activities, our reliance on third-parties, competitive developments, the effect of current and future legislation and regulation and regulatory actions, as well as other risks described more fully in this Quarterly Report on Form 10-Q and our other filings with the Securities and Exchange Commission (the “SEC”). Readers are cautioned that these forward-looking statements are only predictions and are subject to risks, uncertainties, and assumptions that are difficult to predict, including those identified below, under Part II, Item 1A. “Risk Factors” and elsewhere herein and those identified under Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on February 18, 2016. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. We undertake no obligation to revise or update any forward-looking statements for any reason.

As a result of these and other factors, we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

## PART I—FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

HEAT BIOLOGICS, INC.  
Consolidated Balance Sheets

	March 31, 2016 <u>(unaudited)</u>	December 31, 2015
<b>Current Assets</b>		
Cash and cash equivalents	\$ 9,975,690	\$ 4,939,955
Investments, held to maturity (net)	1,859,797	6,689,643
Prepaid expenses and other current assets	648,313	869,158
<b>Total Current Assets</b>	<u>12,483,800</u>	<u>12,498,756</u>
<b>Property and Equipment, net</b>	<u>444,367</u>	<u>445,733</u>
<b>Other Assets</b>		
Restricted cash	101,156	101,151
Deposits	69,798	69,798
Related party receivable	58,017	58,017
Deferred financing costs	—	21,600
<b>Total Other Assets</b>	<u>228,971</u>	<u>250,566</u>
<b>Total Assets</b>	<u>\$ 13,157,138</u>	<u>\$ 13,195,055</u>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 1,488,186	\$ 1,980,676
Accrued expenses and other payables	1,496,573	1,846,907
Current portion of long term debt	3,133,958	3,133,958
<b>Total Current Liabilities</b>	<u>6,118,717</u>	<u>6,961,541</u>
<b>Long Term Liabilities</b>		
Long term debt, net of discount and current portion	2,808,217	3,589,036
Other long term liabilities	259,168	149,748
<b>Total Liabilities</b>	<u>9,186,102</u>	<u>10,700,325</u>
Commitments and Contingencies		
<b>Stockholders' Equity</b>		
Common stock, \$.0002 par value; 50,000,000 shares authorized, 17,524,641 and 8,424,641 shares issued and outstanding at March 31, 2016 (unaudited) and December 31, 2015, respectively	3,186	1,366
Additional paid in capital	54,851,230	48,566,451
Accumulated deficit	(48,990,306)	(44,430,703)
Accumulated other comprehensive loss	(162,391)	(86,584)
<b>Total Stockholders' Equity— Less Non-Controlling Interest</b>	<u>5,701,719</u>	<u>4,050,530</u>
<b>Non-Controlling Interest</b>	<u>(1,730,683)</u>	<u>(1,555,800)</u>
<b>Total Stockholders' Equity – Heat Biologics, Inc.</b>	<u>3,971,036</u>	<u>2,494,730</u>
<b>Total Liabilities and Stockholders' Equity</b>	<u>\$ 13,157,138</u>	<u>\$ 13,195,055</u>

See Notes to Consolidated Financial Statements

**HEAT BIOLOGICS, INC.**  
**Consolidated Statements of Operations and Comprehensive Loss**  
**(unaudited)**

	Three Months Ended, March 31,	
	2016	2015
<b>Operating expenses:</b>		
Research and development	\$ 500,173	\$ 503,551
Clinical and regulatory	3,157,835	2,169,473
General and administrative	1,031,158	1,309,156
Total operating expenses	4,689,166	3,982,180
<b>Loss from operations</b>	<b>(4,689,166)</b>	<b>(3,982,180)</b>
<b>Non-operating income (expenses)</b>		
Interest income	11,101	9,126
Other income	79,701	21,617
Interest expense	(136,122)	(75,430)
Total non-operating expenses, net	(45,320)	(44,687)
<b>Net loss</b>	<b>(4,734,486)</b>	<b>(4,026,867)</b>
Net loss – non-controlling interest	(174,883)	(117,669)
Net loss attributable to Heat Biologics, Inc.	<b>\$ (4,559,603)</b>	<b>\$ (3,909,198)</b>
<b>Net loss per share attributable to Heat Biologics, Inc.—basic and diluted</b>	<b>\$ (0.50)</b>	<b>\$ (0.57)</b>
<b>Weighted-average number of common shares used in net loss per share attributable to Heat Biologics, Inc. —</b>		
basic and diluted	9,124,641	6,814,863
<b>Net loss</b>	<b>(4,734,486)</b>	<b>(4,026,867)</b>
<b>Other comprehensive loss:</b>		
Unrealized loss on foreign currency translation	(75,807)	(20,865)
Total other comprehensive loss	(4,810,293)	(4,047,732)
Comprehensive loss attributable to non-controlling interest	(174,883)	(117,669)
Comprehensive loss attributable to Heat Biologics, Inc.	<b>\$ (4,635,410)</b>	<b>\$ (3,930,063)</b>

See Notes to Consolidated Financial Statements

**HEAT BIOLOGICS INC.**  
**Consolidated Statements of Stockholders' Equity**  
**(unaudited)**

	Common Stock	APIC	Accumulated Deficit	Accumulated Other Comprehensive Loss	Non-Controlling Interest	Total Stockholders Equity
<b>Balance at December 31, 2015</b>	\$ 1,366	\$ 48,566,451	\$ (44,430,703)	\$ (86,584)	\$ (1,555,800)	\$ 2,494,730
Public offering, 9,100,000 shares, net of underwriters discounts	1,820	6,285,430	—	—	—	6,287,250
Stock issuance costs	—	(212,368)	—	—	—	(212,368)
Stock-based compensation	—	211,717	—	—	—	211,717
Other comprehensive loss	—	—	—	(75,807)	—	(75,807)
Net loss	—	—	(4,559,603)	—	(174,883)	(4,734,486)
<b>Balance at March 31, 2016</b>	<b>\$ 3,186</b>	<b>\$ 54,851,230</b>	<b>\$ (48,990,306)</b>	<b>\$ (162,391)</b>	<b>\$ (1,730,683)</b>	<b>\$ 3,971,036</b>

See Notes to Consolidated Financial Statements



**HEAT BIOLOGICS, INC.**  
**Consolidated Statements of Cash Flows**  
**(unaudited)**

	Three Months Ended March 31,	
	2016	2015
<b>Cash Flows from Operating Activities</b>		
Net loss	\$ (4,734,486)	\$ (4,026,867)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	32,361	25,612
Amortization of deferred financing costs and debt issuance costs	25,740	25,038
Amortization of held to maturity investment premium	28,009	23,828
Stock-based compensation	211,717	438,751
Increase (decrease) in cash arising from changes in assets and liabilities:		
Prepaid expenses, restricted cash and other current assets	231,553	(252,380)
Deposits	—	(50,000)
Related party receivable	—	(9,375)
Accounts payable	(494,277)	(555,631)
Accrued expenses and other payables	(352,563)	(81,367)
Other long term liabilities	109,420	—
<b>Net Cash Used in Operating Activities</b>	<u>(4,942,526)</u>	<u>(4,462,391)</u>
<b>Cash Flows from Investing Activities</b>		
Proceeds from maturities of short-term investments	4,801,837	7,811,198
Purchases of short term investments	—	(7,917,102)
Purchase of property and equipment	(30,995)	(8,280)
<b>Net Cash Provided by (Used in) by Investing Activities</b>	<u>4,770,842</u>	<u>(114,184)</u>
<b>Cash Flows from Financing Activities</b>		
Proceeds from public offering, net of underwriting discounts	6,287,250	11,400,870
Stock issuance costs	(190,768)	(270,906)
Payments on long term debt	(806,562)	—
<b>Net Cash Provided by Financing Activities</b>	<u>5,289,920</u>	<u>11,129,964</u>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<u>(82,501)</u>	<u>3,117</u>
<b>Net Increase in Cash and Cash Equivalents</b>	5,035,735	6,556,506
<b>Cash and Cash Equivalents – Beginning of Period</b>	<u>4,939,955</u>	<u>3,714,304</u>
<b>Cash and Cash Equivalents – End of Period</b>	<u>\$ 9,975,690</u>	<u>\$ 10,270,810</u>
<b>Supplemental Disclosure for Cash Flow Information</b>		
Interest paid	<u>\$ 110,377</u>	<u>\$ 50,393</u>

See Notes to Consolidated Financial Statements

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

**1. Summary of Significant Accounting Policies**

***Basis of presentation and Principles of Consolidation***

The accompanying unaudited consolidated financial statements included in this Quarterly Report on Form 10-Q have been prepared in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) for interim financial reporting. However, certain information or footnote disclosures normally included in complete financial statements prepared in accordance with U.S. GAAP have been condensed, or omitted, pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”). In the opinion of the Company’s management, the unaudited consolidated financial statements in this Quarterly Report on Form 10-Q include all normal and recurring adjustments necessary for the fair statement of the results for the interim periods presented. The results for the three months ended March 31, 2016 are not necessarily indicative of the results that may be expected for any other interim period or for the fiscal year ending December 31, 2016.

The consolidated financial statements as of and for the three months ended March 31, 2016 and 2015 included in this Quarterly Report on Form 10-Q are unaudited. The balance sheet as of December 31, 2015 is derived from the audited consolidated financial statements as of that date. The accompanying unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes, together with Management’s Discussion and Analysis of Financial Condition and Results of Operations, contained in the Company’s Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on February 18, 2016 (the “2015 Annual Report”).

The accompanying consolidated financial statements as of and for the three months ended March 31, 2016 and 2015 include the accounts of Heat Biologics, Inc. and its subsidiaries, Heat Biologics I, Inc. (“Heat I”), Heat Biologics III, Inc. (“Heat III”), Heat Biologics IV, Inc. (“Heat IV”), Heat Biologics GmbH and Heat Biologics Australia Pty Ltd. The functional currency of the entities located outside the United States is the applicable local currency (the foreign entities). Assets and liabilities of the foreign entities are translated at period-end exchange rates. Statement of operations accounts are translated at the average exchange rate during the period. The effects of foreign currency translation adjustments are included in other comprehensive loss, which is a component of accumulated other comprehensive loss in stockholders’ equity. All significant intercompany accounts and transactions have been eliminated in consolidation. At December 31, 2015 and March 31, 2016, Heat held a 92.5% controlling interest in Heat I and accounts for its less than 100% interest in the consolidated financial statements in accordance with U.S. GAAP. Accordingly, the Company presents non-controlling interests as a component of stockholders’ equity on its consolidated balance sheets and reports non-controlling interest net loss under the heading “net loss – non-controlling interest” in the consolidated statements of operations and comprehensive loss.

The accompanying consolidated financial statements have been prepared on a going concern basis. The Company has an accumulated deficit of approximately \$49.0 million as of March 31, 2016 and a net loss of approximately \$4.7 million for the quarter ended March 31, 2016, and has not generated significant revenue or positive cash flows from operations. These factors raise substantial doubt about the Company’s ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts of liabilities that might result from the outcome of this uncertainty. To meet its capital needs, the Company is considering multiple alternatives, including, but not limited to, additional equity financings, debt financings and other funding transactions. There can be no assurance that the Company will be able to complete any such transactions on acceptable terms or otherwise. The Company has scaled back its operations and has sufficient cash and cash equivalents to fund our clinical trials until the HS-410 Phase 2 data is released. If the Company is unable to obtain the necessary capital required to maintain operations, it will need to pursue a plan to license or sell its assets, seek to be acquired by another entity and/or cease operations.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

In January 2016, the FASB issued Accounting Standards Update (“ASU”) No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*. ASU 2016-01 requires equity investments to be measured at fair value with changes in fair value recognized in net income; simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial assets on the balance sheet or the accompanying notes to the financial statements and clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity’s other deferred tax assets. ASU 2016-01 is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company does not expect the adoption of this guidance will have a material impact on its consolidated financial statements or related footnote disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases* (Topic 842), which replaces the existing guidance in ASC 840 – Leases. This ASU requires a dual approach for lessee accounting under which a lessee would account for leases as finance leases or operating leases. Both finance leases and operating leases will result in the lessee recognizing a right-of-use asset and a corresponding lease liability. For finance leases, the lessee would recognize interest expense and amortization of the right-of-use asset, and for operating leases, the lessee would recognize a straight-line total lease expense. This ASU is effective for fiscal years beginning after December 15, 2018, and for interim periods within those fiscal years. The Company does not expect this guidance will have a material impact on its consolidated financial statements.

In March 2016, the FASB ASU 2016-09, *Compensation-Stock Compensation* (Topic 718): *Improvements to Employee Share-Based Payment Accounting*, issued guidance to simplify the accounting for share-based payments. This new guidance (1) eliminates the ability to recognize excess tax benefits and certain tax deficiencies in additional paid in capital (“APIC”) and requires all such items be recognized as income tax expense or benefit; (2) eliminates the presentation of excess tax benefits in the financing section of the statement of cash flows and instead requires such items be recognized in the operating activities section of the statement. The Company does not expect the adoption of this guidance will have a material impact on its consolidated financial statements or related footnote disclosures.

In April 2015, the FASB issued ASU 2015-03, *Interest - Imputation of Interest* (Subtopic 835-30): *Simplifying the Presentation of Debt Issuance Costs*. ASU 2015-03 revises Subtopic 835-30 to require that debt issuance costs be reported in the balance sheet as a direct deduction from the face amount of the related liability, consistent with the presentation of debt discounts. Prior to the amendments, debt issuance costs were presented as a deferred charge (i.e., an asset) on the balance sheet. The ASU provides examples illustrating the balance sheet presentation of notes net of their related discounts and debt issuance costs. Further, the amendments require the amortization of debt issuance costs to be reported as interest expense. Similarly, debt issuance costs and any discount or premium are considered in the aggregate when determining the effective interest rate on the debt. The amendments are effective for public business entities for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. The adoption of this ASU resulted in the reclassification of \$20,036 and \$22,707 as of March 31, 2016 and December 31, 2015, respectively.

## **2. Fair Value of Financial Instruments**

The carrying amount of certain of the Company’s financial instruments, including cash and cash equivalents, restricted cash, accounts payable and accrued expenses and other payables approximate fair value due to their short maturities. The carrying value of debt approximates fair value because the interest rate under the obligation approximates market rates of interest available to the Company for similar instruments.

As a basis for determining the fair value of certain of the Company’s financial instruments, the Company utilizes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level I – Observable inputs such as quoted prices in active markets for identical assets or liabilities.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

Level II – Observable inputs, other than Level I prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level III – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the entire fair value measurement requires management to make judgments and consider factors specific to the asset or liability. The majority of the Company's cash equivalents and investments are classified within Level II of the fair value hierarchy.

**3. Investments**

Investments in certain securities may be classified into three categories:

- *Held-to-maturity* - Debt securities that the Company has the positive intent and ability to hold to maturity are reported at amortized cost.
- *Trading securities* - Debt and equity securities that are bought and held principally for the purpose of selling in the near term are reported at fair value with unrealized gains and losses included in earnings.
- *Available-for-sale* - Debt and equity securities not classified as either securities held-to-maturity or trading securities are reported at fair value with unrealized gains or losses excluded from earnings and reported as a separate component of stockholders' equity.

The Company reassesses the appropriateness of the classification of its investments at the end of each reporting period. The Company has determined that its debt securities should be classified as held-to-maturity as of March 31, 2016 and December 31, 2015. This classification was based upon management's determination that it has the positive intent and ability to hold the securities until their maturity dates, as all of the investments mature within 6 months and the underlying cash invested in these securities is not required for current operations. Investments consist of short-term FDIC insured certificates of deposit, tri-party repurchase agreement ("repo") collateralized by U.S. Treasuries and agencies, and corporate notes and bonds rated A and above carried at amortized cost using the effective interest method.

The following table summarizes information about short term investments at March 31, 2016 and December 31, 2015, respectively:

	<u>Amortized Cost</u>	<u>Gross Unrealized (Losses)</u>	<u>Estimated Fair Value</u>
<b>March 31, 2016</b>			
Certificates of deposit, tri-party repurchase agreement, corporate notes and bonds	\$ 1,859,797	\$ (404)	\$ 1,859,393
<b>December 31, 2015</b>			
Certificates of deposit, tri-party repurchase agreement, corporate notes and bonds	\$ 6,689,643	\$ (4,948)	\$ 6,684,695

As of March 31, 2016, the estimated fair value of the investments was less than the amortized cost. Because management has the positive intention and ability to hold the investments until their maturity dates, these unrealized losses were not recorded in the accompanying unaudited condensed consolidated financial statements.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

The maturities of held-to-maturity investments at March 31, 2016 were as follows:

	<u>Less than 1 Year</u>	<u>Total</u>
Certificates of deposit, tri-party repurchase agreement, corporate notes and bonds	\$ 1,859,797	\$ 1,859,797

**4. Property and Equipment**

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful lives, ranging generally from five to seven years. Expenditures for maintenance and repairs are charged to expense as incurred.

Property and equipment consisted of the following:

	<u>March 31, 2016</u>	<u>December 31, 2015</u>
Furniture and fixtures	\$ 55,883	\$ 55,883
Computers	41,373	40,545
Lab equipment	571,232	541,065
<b>Total</b>	<b>668,488</b>	<b>637,493</b>
Accumulated depreciation	(224,121)	(191,760)
Property and equipment, net	<u>\$ 444,367</u>	<u>\$ 445,733</u>

Depreciation expense was \$32,361 and \$25,612 for the three months ended March 31, 2016 and 2015, respectively.

**5. Accrued Expenses and other payables**

Accrued expenses and other payables consist of the following:

	<u>March 31, 2016</u>	<u>December 31, 2015</u>
Accrued clinical trial expenses	\$ 1,345,510	\$ 1,192,936
Compensation and related benefits	55,604	561,082
Deferred rent	50,459	52,889
Patent fees	45,000	40,000
	<u>\$ 1,496,573</u>	<u>\$ 1,846,907</u>

**6. Debt Issuance Costs**

During 2014, the Company recorded \$323,021 to debt discount for the initial fair value of the warrant to purchase common stock and \$27,500 to deferred financing costs related to third party fees paid in connection with the Square 1 Bank loan, which are amortized on a straight-line basis over the 42 month term of the loan which approximates the effective interest method. During 2015, deferred financing costs increased \$7,425 to reflect the fees related to the third tranche of the Square 1 loan, which is further discussed in footnote 7.

Total amortization expense for the debt issuance costs was \$25,740 and \$25,038 during the three months ended March 31, 2016 and 2015, respectively.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

**7. Notes Payable**

***Square 1 Bank Loan***

In August 2014, the Company entered into a secured loan (the "Loan") with Square 1 Bank, which loan is held by Pacific Western Bank as successor in interest by merger to Square 1 Bank (the "Bank"). The Loan provides the Company with a term loan in the aggregate principal amount not to exceed \$7.5 million to be used to supplement working capital. The Loan was available to the Company in four tranches: \$1.5 million was made available to the Company on August 22, 2014 ("Tranche 1 Loan"), \$1.5 million was made available to the Company upon enrollment of the first patient in its Phase 2 clinical trial for HS-110 on December 30, 2014 ("Tranche 2 Loan"), \$2.25 million was made available to the Company upon the initiation of the Phase 1b trial for lung cancer indication on June 30, 2015 ("Tranche 3 Loan"), and \$2.25 million was made available to the Company upon the Bank's receipt of evidence on December 30, 2015 of the full enrollment of our Phase 1/2 clinical trial for HS-410 ("Tranche 4 Loan"). At December 31, 2015, the Company had drawn down the entire \$7.5 million available under the Loan.

The Loan accrues interest monthly at an interest rate of 3.05% plus the prime rate, or 6.30% per annum, whichever is greater. The Tranche 1 Loan was payable as interest-only until June 30, 2015 and thereafter is payable in monthly installments of principal plus accrued interest until February 22, 2018. The Tranche 2 Loan was payable as interest-only prior to October 31, 2015 and thereafter is payable in monthly installments of principal plus accrued interest until February 22, 2018. The Tranche 3 Loan was payable as interest-only prior to October 31, 2015 and thereafter is payable in monthly installments of principal plus accrued interest until February 22, 2018. The Tranche 4 Loan is payable in monthly installments of principal plus accrued interest until February 22, 2018. The Company has made \$806,562 and \$0 in principal payments for the quarter ended March 31, 2016 and 2015, respectively. The Company has made \$110,377 and \$50,393 in interest payments on the outstanding loan for the quarter ended March 31, 2016 and 2015, respectively. The agreement with the Bank sets forth various affirmative and negative covenants. The failure of the Company to comply with one or more of the covenants constitutes a default under the Loan. The covenants were amended in February 2016 to include the following: (i) the Company on or before September 30, 2016, having enrolled at least 18 patients in the Company's DURGA (HS-110) clinical trial; (ii) the Company on or before December 31, 2016, having received favorable data readout from the Phase 2 randomized trial arms evaluating the Company's HS-410 product; and (iii) after December 31, 2016, the Bank and the Company setting additional milestone covenants based upon a Board-approved plan of the Company sufficient to fund the operations necessary to achieve such milestones. The Loan also includes covenants regarding financial reporting, limits on the Company's cash burn, incurrence of indebtedness, permitted investments, encumbrances, distributions, investments and mergers and acquisitions. The Loan is also secured by a security interest in all of the Company's personal property, excluding its intellectual property. The Company is in compliance with the covenants of the Loan as of March 31, 2016.

**8. Stock-Based Compensation**

***Restricted Stock***

The Company recognized \$1,283 and \$66,300 in share-based compensation expense related to issuance of shares of restricted stock to non-employees (i.e., consultants) in exchange for services during the three months ended March 31, 2016 and 2015, respectively.

***Common Stock Warrants***

In connection with the March 23, 2016 public offering, the Company issued 9,100,000 shares of common stock and warrants to purchase 6,825,000 shares of common stock. Each share of common stock was sold together with a warrant to purchase 0.75 of a share of common stock. The warrants have an exercise price of \$1.00 per share and expire five years from the issuance date. The warrants have been accounted for as equity instruments. The fair value of the common stock warrants as of the issuance date was approximately \$2,522,754. In connection with our July 23, 2013 initial public offering, the Company issued warrants to the underwriters for 125,000 shares of common stock issuable at \$12.50 per share upon exercise. The warrants expire five years from the issuance date. On March 10, 2011, the Company issued warrants to purchase shares of common stock to third parties in consideration for a private equity placement transaction. The warrants have an exercise price of \$0.48 per share and expire 10 years from the issuance date. As of March 31, 2016, we have issued warrants to purchase 6,825,000 shares of common stock issuable at \$1.00 per share; warrants to purchase 17,392 shares of common stock issuable at \$0.48 per share and warrants to purchase 125,000 shares of common stock issuable at \$12.50 per share. These warrants do not meet the criteria required to be classified as liability awards and therefore are treated as equity awards.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

**Stock Options**

The following is a summary of the stock option activity for the three months ended March 31, 2016:

	Shares	Weighted Average Exercise Price
Outstanding, December 31, 2015	1,214,686	\$ 4.93
Granted	370,839	\$ 2.47
Forfeited	(11,041)	\$ 6.26
Outstanding, March 31, 2016	<u>1,574,484</u>	<u>\$ 4.34</u>

The weighted average grant-date fair value of stock options granted during the three months ended March 31, 2016 was \$1.62. The fair value of each stock option was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions for stock options granted during the three months ended March 31, 2016:

Dividend yield	0.0%
Expected volatility	73.85%
Risk-free interest rate	1.94%
Expected lives (years)	6.0

The risk-free interest rate is based on U.S. Treasury interest rates at the time of the grant whose term is consistent with the expected life of the stock options. The Company used an average historical stock price volatility based on an analysis of reported data for a peer group of comparable companies that have issued stock options with substantially similar terms, as the Company did not have any trading history for its common stock. Expected term represents the period that the Company's stock option grants are expected to be outstanding. The Company elected to utilize the "simplified" method to estimate the expected term. Under this approach, the weighted-average expected life is presumed to be the average of the vesting term and the contractual term of the option.

Expected dividend yield was considered to be 0% in the option pricing formula since the Company had not paid any dividends and had no plans to do so in the future. The forfeiture rate was considered to be none as the options vest on a monthly basis.

The Company recognized \$210,434 and \$372,451 in stock-based compensation expense for the three months ended March 31, 2016 and 2015, respectively for the Company's stock option awards.

The following table summarizes information about stock options outstanding at March 31, 2016:

Options Outstanding			Options Vested and Exercisable		
Balance as of 3/31/2016	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Balance as of 3/31/2016	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price
1,574,484	7.8	\$4.34	902,857	6.6	\$4.69

As of March 31, 2016, the unrecognized stock-based compensation expense related to unvested stock options was \$1,801,244, which is expected to be recognized over a weighted average period of approximately 18.4 months.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

**9. Financing**

**Public Offering**

On March 23, 2016, the Company closed the issuance and sale of 9,100,000 shares of the Company's common stock and warrants to purchase up to an aggregate of 6,825,000 shares of its common stock, at a combined public offering price of \$0.75 per share and related warrant (the "Offering"). The warrants are exercisable immediately upon issuance, expire five years after the date of issuance and have an exercise price of \$1.00 per share. The net proceeds to the Company from the Offering were approximately \$6.1 million after deducting underwriting discounts, commissions, and other third party offering expenses. In connection with the Offering, the Company entered into an Underwriting Agreement (the "Underwriting Agreement") with Roth Capital Partners, LLC and Aegis Capital Corp., as representatives (the "Representatives") of the several underwriters (collectively, the "Underwriters"). The Underwriting Agreement contains customary representations, warranties, and agreements by the Company, customary conditions to closing, indemnification obligations of the Company and the Underwriters, including for liabilities under the Securities Act of 1933, as amended (the "Securities Act"), other obligations of the parties and termination provisions.

**10. Net Loss Per Share**

Basic and diluted net loss per common share is calculated by dividing net loss applicable to Heat Biologics, Inc. by the weighted-average number of common shares outstanding during the period, without consideration for common stock equivalents. The Company's potentially dilutive shares, which include outstanding stock options and warrants, are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive. The following table reconciles net loss to net loss attributable to Heat Biologics, Inc.:

	Three Months Ended March 31,	
	2016	2015
Net loss	\$ (4,734,486)	\$ (4,026,867)
Net loss: Non-controlling interest	(174,883)	(117,669)
Net loss attributable to Heat Biologics, Inc.	\$ (4,559,603)	\$ (3,909,198)
Weighted-average number of common shares used in net loss per share attributable to Heat Biologics, Inc.—basic and diluted	9,124,641	6,814,863
Net loss per share attributable to Heat Biologics, Inc.—basic and diluted	\$ (0.50)	\$ (0.57)

The following potentially dilutive securities were excluded from the calculation of diluted net loss per share due to their anti-dilutive effect:

	For the Three Months Ended March 31,	
	2016	2015
Outstanding stock options	1,574,484	1,054,306
Common stock warrants	6,842,392	17,392
Underwriters warrants	125,000	125,000

**11. Income Tax**

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases, operating loss carryforwards, and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.



**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

In accordance with FASB ASC 740, *Accounting for Income Taxes*, the Company reflects in the accompanying unaudited condensed consolidated financial statements the benefit of positions taken in a previously filed tax return or expected to be taken in a future tax return only when it is considered 'more-likely-than-not' that the position taken will be sustained by a taxing authority. As of March 31, 2016 and December 31, 2015, the Company had no unrecognized income tax benefits and correspondingly there is no impact on the Company's effective income tax rate associated with these items. The Company's policy for recording interest and penalties relating to uncertain income tax positions is to record them as a component of income tax expense in the accompanying statements of operations and comprehensive loss. As of March 31, 2016 and December 31, 2015, the Company had no such accruals.

## **12. Subsequent Events**

### *Workforce Reduction*

On April 1, 2016, the Board approved a cost-savings plan and focused corporate strategy involving reductions in headcount as well as a deferral in a portion of annual base salaries for the Company's leadership team to decrease operating costs. These cost-saving measures are in response to recent events, including the limited net proceeds raised in the Company's completed financing and an assessment of its capital requirements and assets. The Company is implementing cost-saving measures and a focused corporate strategy to achieve, with its current cash on-hand, data readout in the fourth quarter of 2016 for its lead Phase 2 clinical trial evaluating HS-410 for the treatment of non-muscle invasive bladder cancer (NMIBC). These cost-saving measures are intended to significantly reduce the Company's cost structure and scale the organization appropriately for its current goals. The Company plans to direct its resources primarily to enable the completion of its Phase 2 clinical trial of HS-410 for the treatment of NMIBC and to advance the current eight patients enrolled in its Phase 1b trial evaluating HS-110 in combination with nivolumab, a Bristol-Myers Squibb PD-1 checkpoint inhibitor, for the treatment of non-small cell lung cancer (NSCLC).

The Company's corporate cost-savings plan included a workforce reduction of approximately twenty-two percent (22%) of the Company's headcount, or six positions. The Company estimates that it will incur total expenses relating to termination benefits of approximately \$295,000 in the second quarter of 2016. In the first quarter of 2017, the Company estimates that it will incur expenses of approximately \$299,000 for retention bonuses equal to three months of base salary payable to Dr. Price, Dr. Schreiber and Ms. Rosar, as well as retention bonuses to four other employees that will be paid if the employees remain employed with the Company through December 31, 2016.

### *Departure of Certain Officers and Appointment of Certain Officers*

On April 4, 2016, Louis C. Bock and Michael Kharitonov, Ph.D. each provided the Company with notice of their respective resignations from the Board, effective immediately. Mr. Bock served on the Audit Committee and Dr. Kharitonov served on the Compensation Committee and Nominating and Corporate Governance Committee. Mr. Bock and Dr. Kharitonov had served on the Board since 2013 and 2009, respectively. The resignations from the Board were not due to any disagreement related to the Company's operations, policies or practices.

On April 5, 2016, in connection with the Company's cost-savings plan, the Company entered into a Severance Agreement and General Release (the "Severance Agreements") with each of Timothy Creech, the Company's former Chief Financial Officer and Corporate Secretary, and Anil Goyal, the Company's former Vice President of Business Development, who both departed from the Company effective as of April 4, 2016. The complete terms of the Severance Agreements are filed as Exhibits 10.5 and 10.6 to the Company's Current Report on Form 8-K filed April 7, 2016.

On April 5, 2016, the Company entered into a four-year employment agreement with Ann Rosar (the "Rosar Employment Agreement"), the Company's Controller since January 2015, newly appointing her to serve as the Company's Vice President of Finance, Controller and Corporate Secretary. The complete terms of the Rosar Employment Agreements are filed as Exhibit 10.4 to the Company's Current Report on Form 8-K filed April 7, 2016.

On April 21, 2016, the Company's Board of Directors (the "Board") appointed John K. A. Prendergast, Ph.D. to fill a vacancy on the Board. Dr. Prendergast has been named to serve on the Audit, Compensation and Nominating and Governance Committees of the Board to replace Dr. Paul Belsky who resigned from the Board on April 21, 2016. Dr. Belsky indicated that his resignation was for personal reasons and not due to any disagreement with the Board or the Company's management.

**HEAT BIOLOGICS, INC.**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(Unaudited)

*Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing*

On May 2, 2016, the Company received written notice from the Listing Qualifications Department of The NASDAQ Stock Market LLC (“NASDAQ”) notifying the Company that for the preceding 30 consecutive business days (March 18, 2016 through April 29, 2016), the Company’s common stock did not maintain a minimum closing bid price of \$1.00 (“Minimum Bid Price Requirement”) per share as required by NASDAQ Listing Rule 5550(a)(2). The notice has no immediate effect on the listing or trading of the Company’s common stock and the common stock will continue to trade on The NASDAQ Capital Market under the symbol “HTBX.”

In accordance with NASDAQ Listing Rule 5810(c)(3)(A), the Company has a compliance period of 180 calendar days, or until October 31, 2016, to regain compliance with NASDAQ Listing Rule 5550(a)(2). Compliance can be achieved automatically and without further action if the closing bid price of the Company’s stock is at or above \$1.00 for a minimum of ten consecutive business days at any time during the 180-day compliance period, in which case NASDAQ will notify the Company of its compliance and the matter will be closed.

If, however, the Company does not achieve compliance with the Minimum Bid Price Requirement by October 31, 2016, the Company may be eligible for additional time to comply. In order to be eligible for such additional time, the Company will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for The NASDAQ Capital Market, with the exception of the Minimum Bid Price Requirement, and must notify NASDAQ in writing of its intention to cure the deficiency during the second compliance period.

The Company intends to actively monitor the bid price of its common stock and will consider available options to regain compliance with the NASDAQ listing requirements, including such actions as effecting a reverse stock split to maintain its NASDAQ listing.

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

*You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes included in this Quarterly Report on Form 10-Q. The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those discussed below and elsewhere in this Quarterly Report. This discussion should be read in conjunction with the accompanying unaudited consolidated financial statements and the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the Securities and Exchange Commission on February 18, 2016 (the “2015 Annual Report”). This discussion may contain forward-looking statements that involve risks and uncertainties. See “Forward-Looking Statements.”*

### OVERVIEW

We are an immuno-oncology company developing novel therapies intended to activate a patient’s immune system to fight cancer. Using our T cell-stimulating platform technologies, *ImPACT*® (Immune Pan-Antigen Cytotoxic Therapy) and *ComPACT*™ (Combination Pan-Antigen Cytotoxic Therapy), we have generated several product candidates that we believe may be effective in treating certain forms of cancer. Our platform technologies address two synergistic mechanisms of action: activation of CD8+ T cells, or “killer” T cells; and T cell co-stimulation. We believe the use of these technologies has the potential to enhance patients’ natural immune response against certain cancers.

Using our *ImPACT*® platform technology, we have developed product candidates that consist of live, genetically-modified, irradiated human cancer cells which secrete a broad spectrum of tumor-associated antigens (“TAAs”) together with a potent immune response stimulator called “gp96.” The secreted antigen-gp96/TAA complexes activate a patient’s immune system to recognize and kill cancer cells that express the TAAs included in the product candidates, which we have engineered to address the most prevalent TAAs present in the “tumor signature” of a specific cancer.

Our *ComPACT*™ platform technology enables us to combine a pan-antigen T cell-activating vaccine and a T cell co-stimulator in a single product, offering the potential benefits of combination immunotherapy without the need for multiple independent biologic products. Using *ComPACT*™, we have engineered new product candidates that incorporate various ligand fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB) into the gp96-Ig expression vector, resulting in a single product candidate that includes both a pan-antigen T cell-priming vaccine and a T cell co-stimulator.

Using our platform technologies, we produce product candidates from allogeneic cell lines selected to express the broadest array of commonly shared tumor antigens for a specified type of cancer. Unlike autologous or “personalized” therapeutic vaccine approaches that require the extraction of blood or tumor tissue from each patient and the creation of an individualized treatment, our product candidates are fully allogeneic, do not require extraction of individual patient’s material or custom manufacturing. As a result, our product candidates can be mass-produced and readily available for immediate patient use. Because each patient receives the same treatment, we believe that our immunotherapy approach offers logistical, manufacturing and other cost benefits compared to one-off, patient-specific approaches.

Using our *ImPACT*® platform technology, we have developed HS-410 (vesigenurtacel-L) as a product candidate to treat non-muscle invasive bladder cancer (“NMIBC”) and HS-110 (viagenpumatu cel-L), intended for use in combination with an anti-PD-1 checkpoint inhibitor, as a potential treatment for patients with non-small cell lung cancer (“NSCLC”). To date, we have administered in excess of 1,000 doses of HS-410 and HS-110 collectively in approximately 200 patients. We are currently conducting a Phase 2 trial of HS-410 in patients with NMIBC, which is our primary focus, and a Phase 1b trial of HS-110, in combination with nivolumab (Opdivo®), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to treat patients with NSCLC.

Our lead product candidates are HS-410 and HS-110. Currently, we have completed enrollment in all arms of our Phase 2 trial with HS-410 in patients with NMIBC, and are conducting a Phase 1b trial of HS-110 in combination with nivolumab (Opdivo<sup>®</sup>), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to treat patients with NSCLC. We are devoting substantially all of our resources to developing HS-410 and the advancing of the current eight patients in our Phase 1b clinical trial evaluating HS-110 in combination with nivolumab (Opdivo<sup>®</sup>), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to treat patients with NSCLC. We currently do not have any products approved for sale and we have not generated any significant revenue from product sales since our inception. We expect to continue to incur significant expenses and to incur increasing operating losses for at least the next several years. We anticipate that our expenses will increase substantially as we:

- complete the ongoing clinical trials of our lead product candidates;
- maintain, expand and protect our intellectual property portfolio;
- seek to obtain regulatory approvals for our product candidates;
- continue our research and development efforts;
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts; and
- operate as a public company.

We commenced active operations in June 2008. Our operations to date have been primarily limited to organizing and staffing our company, business planning, raising capital, acquiring and developing our technology, identifying potential product candidates and undertaking preclinical and clinical studies of our most advanced product candidates. To date, we have not generated any revenues and have financed our operations with net proceeds from the private placement of our preferred stock, our initial public offering in which we received gross proceeds of \$27.0 million and net proceeds of \$24.3 million, our March 16, 2015 public offering in which we received gross proceeds of \$12.3 million and net proceeds to us of \$11.1 million, our recent public offering that was completed on March 23, 2016 of 9,100,000 shares of our common stock and warrants to purchase up to an aggregate of 6,825,000 shares of its common stock at a combined price of \$0.75 per share for gross proceeds of \$6.8 million and net proceeds to us of \$6.1 million, and our debt commitments. As of March 31, 2016, we had an accumulated deficit of (\$48,990,306). We had net losses of (\$4,734,486) and (\$4,026,867) for the quarters ended March 31, 2016 and 2015, respectively.

We expect to incur significant expenses and continued losses from operations for the foreseeable future. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development and advance our clinical trials of, and seek marketing approval for, our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts. Accordingly, there is substantial doubt that we can continue as an on-going business for the next twelve months unless we obtain additional capital. To meet our capital needs, we are considering multiple alternatives, including, but not limited to, additional equity financings, debt financings and other funding transactions. This is based on our current estimates, and we could use our available capital resources sooner than we currently expect. We are continually evaluating various cost-saving measures in light of our cash requirements in order to focus our resources on our lead product candidate and, in April 2016, we implemented a cost-savings plan and focused corporate strategy involving reductions in headcount as well as a deferral in a portion of annual base salaries for our leadership team to decrease operating costs. We may take additional action to reduce our immediate cash expenditures, including re-visiting our headcount, offering vendors equity in lieu of the cash due to them and otherwise limiting our other research expenses, in order to focus our resources on our lead product candidate. We will need to generate significant revenues to achieve profitability, and we may never do so.

## HS-410 – Bladder Cancer

HS-410 (vesigenurtacel-L) is a biologic product candidate comprising a cancer cell line genetically modified using our *ImPACT*® technology platform to secrete a wide range of cancer antigens related to bladder cancer bound to gp96 molecules. We believe that HS-410 has the potential to activate a T cell-mediated pan-antigen immune response that could be an effective treatment for patients with NMIBC.

Our primary focus is our Phase 2 trial evaluating HS-410 either alone or in combination with intravesical standard of care, Bacillus Calmette-Guérin (BCG), for the treatment of high-risk NMIBC. The primary endpoint is one-year disease free survival. We completed enrollment for the Phase 2 trial's three randomized, combination arms and anticipate reporting topline efficacy, immune-response and safety data in the fourth quarter of 2016.

On February 25, 2016, we announced that we will no longer enroll new patients in our Phase 2 monotherapy trial arm evaluating HS-410 alone for the treatment of NMIBC. We added the monotherapy trial arm in response to the intermittent global shortage of standard of care BCG in early 2015. The shortage has since been resolved and as such, we will no longer enroll new patients in this trial arm based on discussions with the U.S. FDA. The decision does not relate to concerns regarding the safety profile of HS-410. The 16 patients currently enrolled, out of the anticipated 25 patients, can continue receiving HS-410 monotherapy per the study protocol. We anticipate reporting topline 6-month data from these 16 patients in the fourth quarter of 2016, contemporaneous with reporting data from our three randomized Phase 2 trial arms evaluating HS-410 in combination with BCG.

On February 10, 2016, we announced that the U.S. FDA had lifted the partial clinical hold on our HS-410 Phase 2 clinical trial and that patient enrollment had resumed; clinical timelines were materially unchanged. On February 3, 2016, we announced that we had concluded that the cell line on which HS-410 is based, which is a prostate cancer cell line, had been previously misidentified as a bladder cancer cell line, that we had advised the U.S. FDA of this conclusion and that the U.S. FDA had placed our HS-410 Phase 2 clinical trial on partial clinical hold while they reviewed certain updated documentation provided by us related to the misidentification. The misidentification related to the origin of the cell line and not to the antigen profile or other characteristics of the cell line, which have been accurately characterized throughout the clinical development of HS-410. The partial clinical hold did not relate to concerns regarding the safety and efficacy of HS-410. All data generated and reported remained unchanged, including HS-410's positive safety profile, immune response and shared antigenic profile with patient tumors. Upon becoming aware of the misidentification, we amended all of the documentation necessary to correct the error, including the related investigator brochure, study protocol and informed consent form. Due to the short duration of the clinical hold, we do not expect any material change in our clinical timelines. In addition, we do not expect that the misidentification will have any adverse effect on the future clinical development of HS-410. While our rights to the prostate cancer cell line are non-exclusive, we believe that our intellectual property portfolio, which we expect to be unaffected by the misidentification, will provide us with appropriate protection for the development and potential commercialization of HS-410.

In January 2016, we reported three-month interim data from the unblinded, monotherapy cohort of our company's ongoing Phase 2 trial of HS-410 for the treatment of NMIBC at the Phacilitate Immunotherapy World Conference. In the monotherapy arm, a series of weekly intradermal injections of HS-410 is being dosed as an alternative to BCG. Images of the bladder taken from several treated patients showed changes that resemble lymphoid (T cell rich) structures that we have observed in biopsy samples, which we believe indicates that HS-410 is generating an immune response as expected. Six out of seven patients in the monotherapy arm, who had reached the 3-month timepoint after treatment with HS-410 alone, remained recurrence free. One of those patients had *carcinoma in situ* (CIS) – the patient population believed to be least responsive to BCG – and that patient experienced complete response.

## HS-110 – Non-Small Cell Lung Cancer (“NSCLC”)

HS-110 (viagenpumacel-L) is a biologic product candidate comprising a cancer cell line that has been genetically modified using our *ImPACT*® technology platform to secrete a wide range of cancer associated antigens related to lung cancer bound to gp96 proteins. We believe that HS-110 has the potential to activate a T cell-mediated pan-antigen immune response that could be an effective treatment for patients with NSCLC.

We are conducting a Phase 1b clinical trial evaluating HS-110 in combination with nivolumab (Opdivo<sup>®</sup>), a Bristol-Myers Squibb PD-1 checkpoint inhibitor, to treat patients with NSCLC. The multicenter, open label trial is expected to initially enroll 18 patients and is designed to accommodate cohort expansion up to 30 patients in total. Our intent is to advance the current eight patients enrolled in the Phase 1b clinical trial with the proceeds from our most recent public offering and to continue to enroll patients in this trial only if additional funding becomes available. The purpose of the trial is to evaluate the safety and efficacy of HS-110 in combination with nivolumab, an FDA approved anti-PD-1 checkpoint inhibitor, in patients with NSCLC whose cancers have progressed after first-line therapy. Primary and secondary trial endpoints include safety and tolerability, immune response, overall response rate and progression-free survival. Top-line objective response rate and 6-month progression free survival (PFS) data are expected by the end of 2016 for these first eight patients.

We also are conducting a Phase 2 clinical trial evaluating HS-110 in combination with low dose cyclophosphamide versus chemotherapy alone as a potential third-line or fourth-line treatment in patients with NSCLC. We completed enrollment of 66 patients in this study in September 2015. These patients will be followed for overall survival with data expected to be reported in the fourth quarter of 2016.

#### **Additional Indications**

We continue to evaluate other potential indications for our *ImPACT*<sup>®</sup> and *ComPACT*<sup>™</sup> platform technologies. Specifically, using *ComPACT*<sup>™</sup>, we have developed cell lines for several other cancers with the first product candidate being a second-generation therapy for non-small cell lung cancer (HS-120). Our decision to further pursue these product candidates or any additional product candidates other than our two lead product candidates will be based in part upon available funding and partnering opportunities. On February 18, 2015, we announced a collaboration with OncoSec Medical Inc. to evaluate the feasibility of OncoSec's ImmunoPulse *in vivo* electroporation technology for intra-tumoral delivery of gp96-Ig encoding DNA plasmids to activate specific immune responses against 'private,' mutation-derived tumor neo-antigens. In April 2016, we announced the first preclinical data from this collaboration. Preclinical data demonstrated that combining Heat's *ComPACT* vaccine with OncoSec's intratumoral DNA electroporation delivery platform stimulated an expansion of neoantigen-specific CD8+ T cells, leading to a regression in both treated and untreated cancer tumors in two mouse studies (melanoma and colorectal cancer). These findings provide initial proof-of-principal and warrant further investigation.

#### ***ComPACT*<sup>™</sup>**

On June 15, 2015, we announced the development of a next-generation platform incorporating various T cell costimulatory ligand fusion proteins into the gp96-Ig expression vector. *ComPACT*<sup>™</sup> combines a pan-antigen T cell-priming vaccine and T cell co-stimulator in a single product, offering the potential benefits of combination immunotherapy in a single drug without the need for multiple independent biologic products. *ComPACT*<sup>™</sup> has been engineered to incorporate various fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB), enabling the combination of two important immunotherapy pathways in a single drug. We have reported preclinical data demonstrating that *ComPACT* secreting OX40L generated the most potent immune response among other *ComPACT* co-stimulator variations including TL1A, 4-1BBL and ICOSL, as well as compared to systemic delivery of OX40 agonist antibody and vaccine alone.

#### **CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES**

We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as "critical" because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates—which also would have been reasonable—could have been used, which would have resulted in different financial results.

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates based on historical experience and make various assumptions, which management believes to be reasonable under the circumstances, which form the basis for judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The Company has elected to follow the extended transition period guidance provided for in Securities Act Section 7(a)(2)(B) for complying with new or revised accounting standards. The Company will disclose the date on which adoption of such standards is required for non-emerging growth companies and the date on which the Company will adopt the recently issued accounting standards.

The notes to our audited consolidated financial statements contain a summary of our significant accounting policies. We consider the following accounting policies critical to the understanding of the results of our operations:

- Stock-based compensation;
- Clinical and regulatory costs; and
- Research and development costs.

## RESULTS OF OPERATIONS

### Three Months ended March 31, 2016 Compared to Three Months Ended March 31, 2015

*Research and development expense.* Research and development expense decreased by 1% to \$500,173 for the quarter ended March 31, 2016 compared to \$503,551 for the quarter ended March 31, 2015. The \$3,378 decrease was attributable to reductions in patent, license and other professional fees of \$140,882 primarily associated with our decision to no longer pursue a certain technology. These decreases are offset by increases of \$75,722 in compensation costs associated with new hires, \$56,752 in supplies and facilities costs as we bring more research and development capabilities in-house, and \$5,870 in depreciation related to the build-out of the lab facility. The remaining increase of \$2,538 is attributable to changes in various other expenses.

*Clinical and regulatory expense.* Clinical and regulatory expense increased 46% to \$3,157,835 for the quarter ended March 31, 2016 compared to \$2,169,473 for the quarter ended March 31, 2015. The \$988,362 increase is attributable to increases in clinical trial execution costs of \$805,347 primarily related to the production of clinical trial material, \$263,236 increase in personnel costs associated with additional headcount to support our clinical trials and manufacturing efforts and \$10,564 increase in various other expenses. These increases are offset by a decrease of \$90,785 in professional services and other external third party costs as we bring more capabilities in-house.

*General and administrative expense.* General and administrative expense decreased 21% to \$1,031,158 for the quarter ended March 31, 2016 compared to \$1,309,156 for the quarter ended March 31, 2015. The \$277,998 decrease is attributable to \$185,801 in non-cash stock compensation expense for non-employees associated with the Company's reduced share price and \$76,015 in professional services and third party expenses, primarily related to bringing our investor relations capabilities in-house. The remaining decrease of \$16,182 is attributable to changes in various other expenses.

*Interest income.* Interest income was \$11,101 for the quarter ended March 31, 2016 compared to \$9,126 for the quarter ended March 31, 2015. The decrease of \$1,975 is de minimis.

*Other income.* Other income increased to \$79,701 for the quarter ended March 31, 2016 from \$21,617 for the quarter ended March 31, 2015. Other income is primarily related to the reimbursement of taxes expensed during the previous quarter associated with clinical trial execution in Australia and foreign exchange gains related to the Australian dollar.

*Interest expense.* Interest expense was \$136,122 for the quarter ended March 31, 2016 compared to \$75,430 for the quarter ended March 31, 2015. During the first quarter of 2015 we had drawn down two of four Tranche Loans for \$3.0 million and at the end of 2015 we had drawn down all four Tranche Loans for a total of \$7.5 million. Loan interest was \$110,377 and \$50,393 and amortization of debt issuance costs and debt discount was \$25,745 and \$25,037 for the quarters ended March 31, 2016 and 2015, respectively.

### Balance Sheet at March 31, 2016 and December 31, 2015

*Investments, held to maturity (net).* Investments held to maturity (net) decreased to \$1,859,797 as of March 31, 2016 compared to \$6,689,643 as of December 31, 2015. The decrease was primarily due to the investments converted to cash for use in our operating activities.

*Prepaid expenses and other current assets.* Prepaid expenses and other current assets were \$648,313 as of March 31, 2016 compared to \$869,158 as of December 31, 2015. The decrease of \$220,845 was primarily due to the reduction in the amount paid in advance to our clinical research organizations (CRO) as we progress our clinical trial studies for HS-410 and HS-110.

*Accounts Payable.* Accounts payable was \$1,488,186 as of March 31, 2016 compared to \$1,980,676 as of December 31, 2015. The decrease of \$492,490 was primarily related to payments to one of our drug manufacturers and two of our clinical trial investigator sites that have not occurred in 2016.

*Accrued Expenses and Other Payables.* Accrued expenses were \$1,496,573 as of March 31, 2016 compared to \$1,846,907 as of December 31, 2015. The decrease of \$350,334 was primarily related to 2015 employee bonuses which were accrued at December 31, 2015 but subsequently paid in January 2016.

*Long Term Debt, net of discount deferred/financing .* Long term debt was \$2,808,217 as of March 31, 2016 compared to \$3,589,036 as of December 31, 2015. The decrease of \$780,819 is due to \$806,562 in principal payments offset by \$25,743 in debt discount and deferred financing costs, amortized to expense.

*Foreign currency translation.* The foreign currency translation adjustment included in accumulated other comprehensive loss was \$75,807 for the quarter ended March 31, 2016 compared to \$20,865 for the quarter ended March 31, 2015.

## **LIQUIDITY AND CAPITAL RESOURCES**

### **Sources of liquidity**

To date, we have not generated any revenues. Since our inception in June 2008, we have financed our operations principally through private placements, our July 2013 initial public offering, our March 2015 public offering, our March 2016 public offering, and debt commitments. The total gross proceeds from the March 2016 public offering was \$6.8 million, before the underwriting discount and other offering expenses payable by the Company. The net proceeds to the Company were approximately \$6.1 million. Although we believe our existing cash and cash equivalents will be sufficient to fund our clinical trials until the HS-410 Phase 2 data is released, we believe that our existing cash and cash equivalents will not be sufficient to meet our anticipated cash needs for the next twelve months. We intend to spend substantial amounts on research and development and clinical and regulatory activities, including product development, regulatory and compliance, clinical studies in support of our future product offerings, and the enhancement and protection of our intellectual property. We will need to obtain additional financing to pursue our business strategy, to respond to new competitive pressures or to take advantage of opportunities that may arise. To meet our financing needs, we are considering multiple alternatives, including, but not limited to, current and additional equity financings, debt financings and/or funding from partnerships or collaborations . There can be no assurance that we will be able to complete any such transactions on acceptable terms or otherwise. If we are unable to obtain the necessary capital, we will scale back our operations, license or sell our assets, seek to be acquired by another entity and/or cease operations. We are continually evaluating various cost-saving measures in light of our cash requirements in order to focus our resources on our lead product candidate and, in April 2016, we implemented a cost-savings plan and focused corporate strategy involving reductions in headcount as well as a deferral in a portion of annual base salaries for our leadership team to decrease operating costs. We may take additional action to reduce our immediate cash expenditures, including re-visiting our headcount, offering vendors equity in lieu of the cash due to them and otherwise limiting our other research expenses, in order to focus our resources on our lead product candidate. As of March 31, 2016, we had \$11,835,487 in cash and cash equivalents and short term investments.

Our cash and cash equivalents are currently held in an interest-bearing checking and money market account and short term investment grade securities.

### **Cash flows**

*Operating activities.* The use of cash in all periods resulted primarily from our net losses adjusted for non-cash charges and changes in the components of working capital. The increase in cash used in operating activities for the quarter ended March 31, 2016 compared to the quarter ended March 31, 2015 is due to an increase in clinical and regulatory expenses as we advance our clinical trials. Additionally, there was an increase in other operational costs primarily associated with increases in headcount in all departments.

*Investing activities .* Cash provided by investing activities for the quarter ended March 31, 2016 was primarily from proceeds from maturities of various short-term investments as well as the purchase of property and equipment. Cash used by investing activities for the quarter ended March 31, 2015 was primarily from purchases of various short-term investments as well as the purchase of property and equipment.

*Financing activities.* Cash provided by financing activities during the quarter ended March 31, 2016 was primarily from the March 2016 public offering which generated net proceeds of approximately \$6.1 million. Cash provided by financing activities during the quarter ended March 31, 2015 was primarily from the March 2015 public offering and exercise of the over-allotment option which generated net proceeds of approximately \$11.1 million.



## **Funding requirements**

We believe that our existing cash and cash equivalents will not be sufficient to meet our anticipated cash needs for the next twelve months. To meet our financing needs, we are considering multiple alternatives, including, but not limited to, current and additional equity financings, debt financings and/or funding from partnerships or collaborations. We are continually evaluating various cost-saving measures in light of our cash requirements in order to focus our resources on our lead product candidate and, in April 2016, we implemented a cost-savings plan and focused corporate strategy involving reductions in headcount as well as a deferral in a portion of annual base salaries for our leadership team to decrease operating costs. We may take additional action to reduce our immediate cash expenditures, including re-visiting our headcount, offering vendors equity in lieu of the cash due to them and otherwise limiting our other research expenses, in order to focus our resources on our lead product candidate. Thereafter, we intend to meet our financing needs through the issuance of equity or debt and/or funding from partnerships or collaborations.

## **OFF-BALANCE SHEET ARRANGEMENTS**

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under Securities and Exchange Commission rules.

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

Not applicable to smaller reporting companies.

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

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

Our management, with the participation of our Chief Executive Officer and Vice President of Finance, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2016. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are 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 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 the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. We have adopted and maintain disclosure controls and procedures (as defined Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed in the reports filed under the Exchange Act, such as this Quarterly Report on Form 10-Q, is collected, recorded, processed, summarized and reported within the time periods specified in the rules of the SEC. The Company’s disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to management to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2016 our Chief Executive Officer and Vice President of Finance concluded that, as of such a date, our disclosure controls and procedures were effective at the reasonable assurance level.

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

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) occurred during the quarter ended March 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II—OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS.

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

### ITEM 1A. RISK FACTORS.

The following information and updates should be read in conjunction with the information disclosed in Part 1, Item 1A, “Risk Factors,” contained in our 2015 Annual Report. Except as disclosed below, there have been no material changes from the risk factors and uncertainties disclosed in our 2015 Annual Report.

***We may continue to generate operating losses and experience negative cash flows and it is uncertain whether we will achieve profitability.***

For the three months ended March 31, 2016 and March 31, 2015, we incurred a net loss of \$4.7 million and \$4.0 million, respectively. For the years ended December 31, 2015 and December 31, 2014, we incurred a net loss of \$21.1 million and \$12.2 million, respectively. We have an accumulated deficit of \$49.0 million through March 31, 2016. We expect to continue to incur operating losses until such time, if ever, as we are able to achieve sufficient levels of revenue from operations. Our ability to achieve profitability will depend on us obtaining regulatory approval for our product candidates and market acceptance of our product offerings and our capacity to develop, introduce and sell our products to our targeted markets. There can be no assurance that any of our product candidates will be approved for commercial sale, or even if our product candidates are approved for commercial sale, that we will ever generate significant sales or achieve profitability. Accordingly, the extent of future losses and the time required to achieve profitability, if ever, cannot be predicted at this point.

Even if we succeed in developing and commercializing one or more product candidates, we expect to incur substantial losses for the foreseeable future and may never become profitable. We also expect to continue to incur significant operating expenses and anticipate that our expenses will increase substantially in the foreseeable future as we:

- continue to undertake preclinical development and conduct clinical trials for product candidates;
- seek regulatory approvals for product candidates;
- implement additional internal systems and infrastructure; and
- hire additional personnel.

We also expect to experience negative cash flows for the foreseeable future as we fund our operating losses. As a result, we will need to generate significant revenues or raise additional financing in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability would likely negatively impact the value of our securities and financing activities.

***The possible issuance of common stock subject to options and warrants may dilute the interest of stockholders.***

In 2009, we adopted a 2009 Stock Option and Restricted Stock Plan (the “2009 Plan”). In 2014, we adopted a 2014 Stock Incentive Plan (the “2014 Plan”) and in 2015 we increased the number of shares of common stock that we have authority to grant under the 2014 Plan. As of March 31, 2016, awards for 2,189,512 shares of common stock have been granted under the 2009 Plan and the 2014 Plan and there were 93,499 shares of common stock remaining available for grant under these plans. In addition, as of March 31, 2016, we have 17,392 shares issuable upon exercise of warrants granted to third parties in connection with prior private placements of our equity securities and debt, 6,825,000 shares of common stock issuable upon exercise of warrants granted to third parties in connection with our recent public offering which excludes 125,000 shares of common stock issuable at \$12.50 per share upon exercise of warrants issued to the underwriters in connection with our initial public offering. To the extent that outstanding stock options and warrants are exercised, or additional securities are issued, dilution to the interests of our stockholders may occur. Moreover, the terms upon which we will be able to obtain additional equity capital may be adversely affected since the holders of the outstanding options can be expected to exercise them at a time when we would, in all likelihood, be able to obtain any needed capital on terms more favorable to us than those provided in such outstanding options.

***Future sales of our common stock by our existing stockholders could cause our stock price to decline.***

As of May 11, 2016, we had 17,524,641 shares of our common stock outstanding, all of which are currently eligible for sale in the public market, subject, in certain circumstances to the volume, manner of sale and other limitations under Rule 144 or 701 promulgated under the Securities Act. It is conceivable that stockholders may wish to sell some or all of their shares. If our stockholders sell substantial amounts of our common stock in the public market at the same time, the market price of our common stock could decrease significantly due to an imbalance in the supply and demand of our common stock. Even if they do not actually sell the stock, the perception in the public market that our stockholders might sell significant shares of our common stock could also depress the market price of our common stock.

A decline in the price of shares of our common stock might impede our ability to raise capital through the issuance of additional shares of our common stock or other equity securities, and may cause stockholders to lose part or all of their investment in our shares of common stock.

***Our management team may invest or spend the proceeds of our prior offering in ways with which stockholders may not agree or in ways which may not yield a significant return.***

Our management will have broad discretion over the use of proceeds from our March 2016 public offering and additional future financings. The intended use of our net proceeds from the March 2016 public offering is to continue to fund our current Phase 2 trial of HS-410 for the treatment of NMIBC and to advance the current eight patients enrolled in our Phase 1b trial evaluating HS-110 in combination with nivolumab, a Bristol-Myers Squibb PD-1 checkpoint inhibitor, for the treatment of NSCLC through the reporting of topline data; and the remaining net proceeds will be used for licensing or acquisition of assets complementary to our existing programs, as well as working capital and general corporate purposes. Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds may be used for corporate purposes that do not improve our operating results or enhance the value of our common stock.

***Sales of additional shares of common stock, including by us or our directors and officers following expiration or early release of the lock-up periods, could cause the price of our common stock to decline.***

Sales of substantial amounts of our common stock in the public market, or the availability of such shares for sale, by us or by others, including the issuance of shares of common stock upon the exercise of outstanding options and warrants, could adversely affect the price of our common stock. In connection with this offering, we and our directors and officers have entered into lock-up agreements for a period of 90 days following our recent public offering. We and our directors and officers may be released from the lock-up prior to its expiration period at the sole discretion of the representatives of the underwriters. Upon expiration or earlier release of the lock-up, we and our directors and officers may sell shares of our common stock into the market, which could adversely affect the market price of our common stock.

***Holders of our warrants will have no rights as a common stockholder until they acquire our common stock.***

Until warrant holders acquire shares of our common stock upon exercise of their warrants, the warrant holders will have no rights with respect to shares of our common stock issuable upon exercise of their warrants. Upon exercise of the warrants, the warrant holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

***The warrants issued in our recent public offering may not have any value.***

Each warrant that we issued in our recent public offering will have an exercise price of \$1.00 per share and will expire on the fifth anniversary of the original issuance date. In the event our common stock price does not exceed the exercise price of the warrants during the period when the warrants are exercisable, the warrants may not have any value.

***There is no established market for the warrants issued in our recent public offering to purchase shares of our common stock being offered in this offering.***

There is no established trading market for the warrants issued in our recent public offering and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the warrants will be limited.

***Our failure to meet the continued listing requirements of the NASDAQ Capital Market could result in a de-listing of our common stock.***

Our shares of common stock are currently listed on The NASDAQ Capital Market. If we fail to satisfy the continued listing requirements of The NASDAQ Capital Market, such as the corporate governance requirements, minimum bid price requirement or the minimum stockholder's equity requirement, The NASDAQ Capital Market may take steps to de-list our common stock. Any de-listing would likely have a negative effect on the price of our common stock and would impair our stockholders' ability to sell or purchase our common stock when they wish to do so. On May 2, 2016, we received written notice from the Listing Qualifications Department of NASDAQ Stock Market LLC ("NASDAQ") notifying us that for the preceding 30 consecutive business days (March 18, 2016 through April 29, 2016), our common stock did not maintain a minimum closing bid price of \$1.00 ("Minimum Bid Price Requirement") per share as required by NASDAQ Listing Rule 5550(a)(2). The notice has no immediate effect on the listing or trading of our common stock which will continue to trade on The NASDAQ Capital Market under the symbol "HTBX." In accordance with NASDAQ Listing Rule 5810(c)(3)(A), we have a compliance period of 180 calendar days, or until October 31, 2016, to regain compliance with NASDAQ Listing Rule 5550(a)(2). Compliance can be achieved automatically and without further action if the closing bid price of our common stock is at or above \$1.00 for a minimum of ten consecutive business days at any time during the 180-day compliance period, in which case NASDAQ will notify us of our compliance and the matter will be closed. If, however, we do not achieve compliance with the Minimum Bid Price Requirement by October 31, 2016, we may be eligible for additional time to comply. In order to be eligible for such additional time, we will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for The NASDAQ Capital Market, with the exception of the Minimum Bid Price Requirement, and must notify NASDAQ in writing of our intention to cure the deficiency during the second compliance period. The May 2, 2016 notice was the second notice we received this year from NASDAQ. In February, 2016, we were notified by NASDAQ that we had failed to maintain the required stockholder's equity, which deficiency was cured in March 2016 by our sale of securities in a public offering. In the event of any de-listing, we would take actions to restore our compliance with The NASDAQ Capital Market's listing requirements, but we can provide no assurance that any action taken by us would result in our common stock becoming listed again, or that any such action would stabilize the market price or improve the liquidity of our common stock.

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

None.

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

Not Applicable.

**ITEM 4. MINE SAFETY DISCLOSURES .**

Not Applicable.

**ITEM 5. OTHER INFORMATION.**

None.

**ITEM 6. EXHIBITS.**

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, which Exhibit Index is incorporated herein by reference.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

**HEAT BIOLOGICS, INC.**

Date: May 11, 2016

By: /s/ Jeffrey A. Wolf  
Jeffrey A. Wolf  
*Chairman and Chief Executive Officer*  
*(Principal executive officer)*

Date: May 11, 2016

By: /s/ Ann A. Rosar  
Ann A. Rosar  
*Vice President of Finance*  
*(Principal financial and accounting officer)*

## EXHIBIT INDEX

Exhibit No.	Description
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Vice President of Finance pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Vice President of Finance pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

\* Filed herewith.

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER  
PURSUANT TO RULE 13a-14 OR RULE 15d-14 OF THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Jeffrey Wolf, certify that:

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

Date: May 11, 2016

By: /s/ Jeffrey Wolf

Name: Jeffrey Wolf

Title: Chief Executive Officer

(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER  
PURSUANT TO RULE 13a-14 OR RULE 15d-14 OF THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Ann Rosar, certify that:

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

Date: May 11, 2016

By: /s/ Ann Rosar  
Name: Ann Rosar  
Title: Vice President of Finance  
(Principal Financial and Accounting Officer)



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

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Heat Biologics, Inc. (the “Registrant”) hereby certifies, to such officer’s knowledge, that:

- (1) the accompanying Quarterly Report on Form 10-Q of the Registrant for the quarter ended March 31, 2016 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: May 11, 2016

By: /s/ Jeffrey Wolf  
Name: Jeffrey Wolf  
Title: Chief Executive Officer  
(Principal Executive Officer)

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

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Heat Biologics, Inc. (the “Registrant”) hereby certifies, to such officer’s knowledge, that:

- (1) the accompanying Quarterly Report on Form 10-Q of the Registrant for the quarter ended March 31, 2016 (the “Report”) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: May 11, 2016

By: /s/ Ann Rosar  
Name: Ann Rosar  
Title: Vice President of Finance  
(Principal Financial and Accounting Officer)