

**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 December 8, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was \$1.03 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 Current Report on Form 8-K filed on December 9, 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. 16 is December 9, 2016.

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): **December 6, 2016**

**Heat Biologics, Inc.**

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

**Delaware**

*(State or other jurisdiction of incorporation)*

**001-35994**

*(Commission File Number)*

**26-2844103**

*(IRS Employer Identification No.)*

**801 Capitola Drive  
Durham, NC 27713**

*(Address of principal executive offices and zip code)*

**(919) 240-7133**

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

**N/A**

*(Former Name and Former Address)*

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - ☐ Soliciting material pursuant to Rule 14a-12(b) under the Exchange Act (17 CFR 240.14a-12)
  - ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 1.02. Termination of a Material Definitive Agreement.**

On December 6, 2016, Heat Biologics, Inc. (the “Company”) made a payment to Pacific Western Bank (formerly known as Square 1 Bank) in the amount of approximately \$2.7 million in full satisfaction of the outstanding principal and accrued interest then due on that certain Loan and Security Agreement, dated August 22, 2014, between the Company and Pacific Western Bank (the “Loan and Security Agreement”). Upon payment, the Loan and Security Agreement was terminated, which positions the Company with no long-term debt moving into 2017.

The Loan and Security Agreement provided, under certain conditions and the achievement of specified milestones, for up to four (4) term loans to the Company in the aggregate principal amount of up to \$7.5 million for working capital purposes. The Company received term loans in the aggregate principal amount of \$7.5 million under the Loan and Security Agreement, each of which accrued interest from its date of issue at a variable annual interest rate equal to the greater of 3.05% plus prime or 6.30% per annum and was secured by a security interest in all of the Company’s personal property, excluding its intellectual property. The Loan and Security Agreement had also set forth various covenants that had to be complied with. No pre-payment penalty was paid in connection with the termination of the Loan and Security Agreement.

This summary description of the Loan and Security does not purport to be complete and is subject to, and qualified in its entirety by reference to the Agreement, which was attached as Exhibit 4.1 to the Company’s Form 8-K, dated August 25, 2014, and is incorporated herein by reference.

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## 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 hereunto duly authorized.

Dated: December 8, 2016

HEAT BIOLOGICS, INC.

By: /s/ Jeffrey Wolf  
Name: Jeffrey Wolf  
Title: Chairman, President and Chief Executive Officer