

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 2, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was \$0.67 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 the Current Report on Form 8-K filed on May 3, 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. 4 is May 3, 2016.

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): **May 2, 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))
-
-

Item 3.01. Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing.

On May 2, 2016, Heat Biologics, Inc. (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.

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: May 3, 2016

HEAT BIOLOGICS, INC.

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