



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

December 14, 2016

Jeffrey Wolf
Chief Executive Officer and President
Heat Biologics, Inc.
801 Capitola Drive
Durham, North Carolina 27713

**Re: Heat Biologics, Inc.
Registration Statement on Form S-3
Filed December 1, 2016
File No. 333-214868**

Dear Mr. Wolf:

We have limited our review of your registration statement to those issues we have addressed in our comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this comment, we may have additional comments.

General

1. We note that you have a pending request for confidential treatment. Please be advised that we will not be in a position to declare your registration statement effective until we resolve any issues concerning the confidential treatment request.

Incorporation of Certain Documents by Reference, page 11

2. Please update this section to incorporate by reference your Current Reports on Form 8-K filed on December 6, 2016 and December 9, 2016. For guidance, please see Compliance and Disclosure Interpretations, Securities Act Forms, Question 123.05.

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We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Jeffrey Gabor at (202) 551-2544 or Mary Beth Breslin at (202) 551-3625 with any questions.

Sincerely,

/s/ Mary Beth Breslin for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Leslie Marlow, Esq.
Gracin & Marlow, LLP