



The Chrysler Building
405 Lexington Avenue, 26th Floor
New York, New York 10174
Telephone (212) 907-6457
www.gracinmarlow.com

November 8, 2017

VIA EDGAR

United States Securities
and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Mr. Jeff Gabor

**Re: Heat Biologics, Inc.
Registration Statement on Form S-3
Filed October 30, 2017
File No: 333-221201**

Dear Mr. Gabor

On behalf of our client, Heat Biologics, Inc. (the "Company"), we submit this letter in response to an oral comment that we received from the staff (the "Staff") of the Securities and Exchange Commission during a conversation with the Staff on November 8, 2017 relating to the above-referenced Registration Statement on Form S-3 (the "Registration Statement") and the prospectus included therein (the "Prospectus"). For ease of reference, the Staff's oral comment is set forth in this letter in italic type immediately before the response submitted on behalf of the Company, which oral comment has been incorporated into this response letter.

SEC Oral Comment:

Prospectus Cover Page

- 1. Please revise the cover page to the Prospectus to clarify that the aggregate market value of the securities sold by the Company or on the Company's behalf during the period of the 12 calendar months prior to the date of the Prospectus. For instance, we note that from the Prospectus Supplement filed on March 24, 2017 and April 28, 2017 and the Form 10-Q, as amended on September 15, 2017, that you may have sold over \$6.5 million pursuant to the At Market Issuance Sales Agreement with FBR Capital Market and raised \$4.6 million in gross proceeds in a public offering in March 2017.*

Company Response:

On November 28, 2016, the aggregate market value of the outstanding common stock then held by non-affiliates was in excess of \$75,000,000. Accordingly, all sales of common stock from November 29, 2016 through March 31, 2017 (the date of the filing of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016) were made pursuant to General

Instruction I.B.1 of Form S-3 and not pursuant to General Instruction I.B.6 of Form S-3. As a result, these sales have not been included in the aggregate market value of the securities sold by or on behalf of the Company under General Instruction I.B.6 during the period of the 12 calendar months prior to the date of the Prospectus. Based on the foregoing, we believe the disclosure on the cover page of the Prospectus regarding the aggregate market value of the securities sold by the Company or on the Company's behalf during the period of the 12 calendar months prior to the date of the Prospectus is accurate.

If you have any questions or need additional information, please contact the undersigned at (516) 496-2223 or (212) 907-6457, or my colleague Patrick Egan at (914) 557-5574.

Sincerely,

/s/ Leslie Marlow
Leslie Marlow

cc: Jeffrey Wolf
Chief Executive Officer of Heat Biologics, Inc.