



DIVISION OF  
CORPORATION FINANCE

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

October 17, 2017

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

**Re: Heat Biologics, Inc.**  
**Amendment No. 1 to Form S-1**  
**Filed October 10, 2017**  
**File No. 333-220470**

Dear Mr. Wolf:

We have reviewed your amended registration statement and have the following comment.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies 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 the comment, we may have additional comments.

Amendment No. 1 to Form S-1

Cover Page

1. Please revise the cover page to state that you are offering subscription rights to purchase up to 15 million shares of common stock. The top of the prospectus cover page where you state that the offering will be for rights to purchase "up to" 12 million shares suggests that the offering will be limited to rights for 12 million shares, but footnote 2 to the net proceeds table states the size of the offering may be increased to subscription rights to purchase up to an aggregate of 15 million shares.

Jeffrey Wolf  
Heat Biologics, Inc.  
October 17, 2017  
Page 2

Please contact Chris Edwards at (202) 551-6761 or Mary Beth Breslin at (202) 551-3625 with any questions.

Division of Corporation Finance  
Office of Healthcare & Insurance

cc: Leslie Marlow