



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
100 F Street, NE
WASHINGTON, D.C. 20549

January 10, 2013

Via U.S. Mail and facsimile 954-845-9976

Mike Tomas
Chief Executive Officer
Bioheart, Inc.
13794 NW 4th Street, Suite 212
Sunrise, Florida 33325

Re: Bioheart, Inc. ("the company")
File No.: 001-33718

Dear Mr. Tomas:

In your letter and accompanying affidavit dated January 3, 2013, you requested that the staff waive the requirement to provide the inception to date cumulative financial data on an audited basis in the company's December 31, 2011 Form 10-K and future filings. The company's predecessor auditor Jewett Schwartz Wolfe & Associates ("JSW") audited the company's inception to date cumulative financial data from August 12, 1999 to December 31, 2009. The company is unable to have JSW re-issue its prior audit report because it has ceased operations and the PCAOB has revoked the firm's registration effective September 7, 2012.

The staff does not object to your request. The company should amend its Form 10-K to remove any copy of or reference to the prior JSW audit report and label the columns of the inception to date cumulative financial data as "Unaudited". The audit reports on the 2011 and 2010 financial statements should be revised to remove any reference to JSW's prior audit report and the audit of the inception to date cumulative financial data. The audit report on the company's December 31, 2010 financial statements issued by RBSM LLP dated May 10, 2011 also should be included in the amended 10-K and post-effective amendment to Form S-1 as well as any applicable future filings.

The company should not make any reference to the financial statements for the year ended December 31, 2009 or any prior years that were audited by JSW in its amended Form 10-K or any future filings. Accordingly, the company should not provide the proposed Risk Factor disclosures on page 2 of your letter in the amended Form 10-K or future filings because no financial statements audited by JSW will be presented in the amended Form 10-K or future filings.

The staff's conclusion is based solely on the information provided in your letter and affidavit. Different or additional material facts could result in a different conclusion. If you have any questions concerning this letter, please contact me at 202-551-3511.

Sincerely,

Louise M. Dorsey
Associate Chief Accountant