

August 1, 2012

**VIA EDGAR AND FEDERAL EXPRESS**

United States Securities and Exchange Commission  
Division of Corporate Finance  
100 F Street, NE  
Washington, DC 20549-3561  
Attention: Amanda Ravitz, Assistant Director

Re: Sunshine Heart, Inc. Registration Statement on Form S-1 (File No. 333-182727) (the "Registration Statement")

Ladies and Gentlemen:

On behalf of Sunshine Heart, Inc. (the "Company"), we are transmitting Amendment No. 2 to the Registration Statement (the "Amendment") in a clean version and two copies of the Amendment in a version marked to show changes from Amendment No. 1 to the Registration Statement.

In response to verbal comments to the Registration Statement received from the Commission's staff (the "Staff") on July 31, 2012, the Company revised pages 4 through 6 of the Amendment to delete the charts that disclose detailed results of the Company's feasibility trial.

The Company acknowledges that (i) the Company is responsible for the adequacy and accuracy of the disclosure in the filing, (ii) Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and (iii) the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please do not hesitate to call me at 612-766-8419 if you have any questions or comments regarding the foregoing or if we can be of service in facilitating your review of this filing.

Sincerely,

*/s/ Jonathan R. Zimmerman*

Jonathan R. Zimmerman

Enclosures

cc: Tim Buchmiller, Securities and Exchange Commission (w/ encl.)  
David Rosa, Chief Executive Officer, Sunshine Heart, Inc. (w/out encl.)  
Jeffrey Mathiesen, Chief Financial Officer, Sunshine Heart, Inc. (w/out encl.)

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