

SUNSHINE HEART, INC.
12988 Valley View Road
Eden Prairie, Minnesota 55344

February 14, 2012

VIA EDGAR

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 10 (File No. 001-35312) (the "Registration Statement")

Ladies and Gentlemen:

Sunshine Heart, Inc. (the "Company") is transmitting with this letter Amendment No. 5 to the Registration Statement.

In response to verbal comments to the Registration Statement received from the Commission's staff (the "Staff") on February 10, 2012, the Company revised the narrative description below the Summary Compensation Table.

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 or Matt Kuhn of Faegre Baker Daniels LLP at 612-766-8134 if you have any questions or comments regarding the foregoing or if the Company can be of service in facilitating your review of this filing.

Sincerely,

SUNSHINE HEART, INC.

/s/ Jeffrey Mathiesen

Jeffrey Mathiesen
