

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

September 10, 2009

David McIntyre 205 Newbury Street, Suite 101 Framingham, Massachusetts 01701

Re: HeartWare International, Inc.

Registration Statement on Form S-3 Response Letter Dated September 4, 2009

File No. 333-161417

Dear Mr. McIntyre:

We have limited our review of your filing to those issues we have addressed in our comments. If you disagree with any of our comments, we will consider your explanation as to why a comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Selling Stockholders, page 3

1. We are unable to agree with the analysis in your response to prior comment 1. Your analysis addresses the registration of the resale of shares to be issued in a PIPE transaction for which the closing will occur a short time after the effectiveness of the resale registration statement. In contrast, you appear to be attempting to register an offering the sell your shares when you do not have shareholder approval required for that sale. Therefore, we reissue prior comments 1 and 2.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please provide this request at least two business days in advance of the requested effective date.

Please contact Ruairi Regan at (202) 551-3269 or me at (202) 551-3617 if you have any questions regarding our comments.

Sincerely,

Russell Mancuso Branch Chief

cc (via fax): Robert Evans III