

January 22, 2007

Mail Stop 6010

Jal S. Jassawalla  
Chief Executive Officer  
World Heart Corporation  
7799 Pardee Lane  
Oakland, CA 94621

**Re: World Heart Corporation  
Registration Statement on Form S-3  
Filed on December 26, 2006  
File No. 333-139662**

Dear Mr. Jassawalla:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. 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 comment or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. We note response 2 in your letter dated December 12, 2006. However, it remains unclear whether your transaction amounts to an offering by or on behalf of the issuer of the securities. Please tell us:
  - the nature of the business of each selling shareholder, including the portion of its business derived from buying and selling securities;
  - the percentage by which the price you sold securities to the selling shareholders differed from the historic range of the market prices for your securities;
  - the length of time during which the selling shareholders have held the offered common stock;
  - the selling shareholders' historic pattern of sales of your common stock;
  - the portion of the trading volume of your securities represented by the selling shareholders' sales on the days in which they sold securities;
  - the portion of your assets derived from the offering;
  - the nature of any relationship among the purchasers in all tranches of the private offering;

- whether selling security holders who are affiliates of broker-dealers purchased the shares being registered for resale in the ordinary course of business, and at the time of the purchase, had any agreements or understandings, directly or indirectly, with any person to distribute the securities.

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2. Please clarify whether this registration statement registers the sale of the shares underlying the warrants mentioned in the footnotes. Also clarify any relationship between the warrants and the transaction in which the selling shareholders acquired the offered shares.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comment and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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.

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.

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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 will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Jay Mumford at (202) 551-3637 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso  
Branch Chief

cc: Julia Vax