Author’s response to reviews

Title: LV Reverse Remodeling Imparted by Aortic Valve Replacement for Severe Aortic Stenosis; Is it Durable? A Cardiovascular MRI Study sponsored by the American Heart Association

Authors:

Robert W.W. Biederman (rbiederm@wpahs.org)
James A. Magovern (rbiederm@wpahs.org)
Saundra B. Grant (sgrant@wpahs.org)
Ronald B. Williams (rwilliams@wpahs.org)
June A. Yamrozik (jyamrozik@wpahs.org)
Diane A. Vido (dvido@wpahs.org)
Vikas K. Rathi (vikas_rathi@bshsi.org)
Geetha Rayarao (grayarao@wpahs.org)
Ketheswaran Caruppannan (kcaruppa@wpahs.org)
Mark Doyle (mdoyle@wpahs.org)

Version: 3 Date: 18 March 2011

Author’s response to reviews:

March 17, 2011

Dear Dr. Zamvar,

Thank you for the review of our manuscript entitled, “LV Reverse Remodeling Imparted by Aortic Valve Replacement for Severe Aortic Stenosis; Is it Durable? A Cardiovascular MRI Study sponsored by the American Heart Association”. Enclosed please find our slightly revised manuscript.

Our manuscript used high-resolution Cardiac MRI in a series of patients pre and up to 4 years following AVR for compensated aortic stenosis and defines the temporal pattern of LV mass regression and other metrics of LV remodeling in a 3D manner. To our knowledge, this is the longest and most well defined population that has undergone CMR. When considering that the accuracy and precision of CMR is far superior to traditional echocardiographic measures, the inability for complete LV mass regression is further explored. We demonstrate that incomplete mass regression may not be due to intrinsic factors related to the choice of valve or pre-AVR conditions. This manuscript was funded via my AHA National Scientist Development Grant that was completed in 2009.

This manuscript is not under review elsewhere and has been approved by its co-authors.

We also note that the second author, Jim Magovern, MD, now sadly deceased, was a major contributor to the manuscript in its’ inception and for the
performance of many of the AVRs.

We have made minimal changes to the manuscript; specifically we have: 1) removed condensed abstract, 2) added Author Contribution Section, 3) changed Figure 5, 4) changed Figure legend page regarding Figure 5, 5) formatted the title, 6) added a Competing Interest section, and 7) formatted Reference section.

Sincerely,

Robert W. W. Biederman, MD, FACC, FAHA, FSGC, FASA
Associate Professor of Medicine
Director, Cardiovascular Magnetic Resonance Imaging
Drexel University, College of Medicine
Gerald McGinnis Cardiovascular Institute
Adjunct Associate Professor of Bioengineering
Carnegie Mellon University
Allegheny General Hospital
320 East North Avenue
Pittsburgh, Pennsylvania 15212
Ph: 412-359-8705
Fax: 412-359-6358
http://www.pittsburghheartcare.com/services/mri_training.html
http://vrbo.com/257951