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**NON-INVASIVE MEASUREMENT OF HEART MUSCLE CONTRACTILITY PROVIDES BEST PREDICTOR OF SURVIVAL AFTER AORTIC VALVE REPLACEMENT****Findings of 28-Year Study, Presented by Jeffrey S. Borer, MD, at 57<sup>th</sup> Annual Scientific Session of the American College of Cardiology, Conclude that the Measure, Previously Shown to Predict Outcomes for Patients Without Surgery, Also is Best Predictor After Valve Replacement**

**Chicago, March 30, 2008** — At the 57<sup>th</sup> Annual Scientific Session of the American College of Cardiology (ACC), Dr. Jeffrey S. Borer is presenting the findings of a 28-year study that show that a non-invasively measured contractility descriptor previously used to predict clinical outcomes in patients with aortic regurgitation (AR — leaking aortic valve) without surgery is also a superior measure for determining survival after AR is relieved by aortic valve replacement (AVR).

Borer's presentation summarizes the study, "Preoperative Wall-Stress-Adjusted Ejection Fraction Change with Exercise Best Predicts Survival after Aortic Valve Replacement for Chronic Severe Aortic Regurgitation."

"In the 1990s, we developed a measure of contractility that successfully predicts adverse cardiac outcomes (heart failure, subnormal ejection fraction at rest — a known high risk predictor — and sudden death) in patients with AR who have not had valve surgery," said Dr. Borer. "For several years, we have been using this measurement to identify the time at which valve surgery should be performed for AR. Now, we have found that this same measurement strongly predicts results after aortic valve replacement has relieved AR. The measure is valid whether a patient is symptomatic or asymptomatic at the time of surgery."

The study began in 1979. Patients who survived surgery were followed for an average of 12 years. Some were monitored for as long as 20 years. The researchers have concluded that for patients with AR, the non-invasive contractility measurement is independently predictive and superior to other clinical and objective measurements for predicting post-AVR survival. Thus, decisions concerning prophylactic AVR are properly based on this measurement.

Jeffrey S. Borer is Gladys & Roland Harriman Professor of Cardiovascular Medicine, as well as Director of Cardiovascular Pathophysiology and Co-Director of The Howard Gilman Institute for Valvular Heart Diseases, at NewYork-Presbyterian Hospital/ Weill Cornell Medical Center. He is also President of the Heart Valve Society of America. Dr. Borer has been a FDA advisor since 1977 and served three terms as Chair of the FDA's Cardio-Renal Drugs Advisory Committee between 1982 and 2004.

Other study authors include Phyllis Supino, Ed.D., Edmund M. Herrold, MD, Frans Beltran, MD, Richard B Devereux, MD, Mary J Roman, MD, Karl H. Krieger, MD, Leonard Girardi, MD and O. Wayne Isom, MD.

**The Howard Gilman Institute for Valvular Heart Diseases**, Weill Cornell Medical College, helps cardiologists, cardiothoracic surgeons and other physicians take advantage of the most current concepts in the evaluation and treatment of heart valve diseases and provides state-of-the-art patient care. The Institute's co-directors, Jeffrey S. Borer, MD and O. Wayne Isom, MD, are leaders in their fields and direct a team of clinical cardiologists, surgeons and research scientists who are at the cutting-edge of this emerging public health concern. For more information, visit [www.gilmanheartvalve.org](http://www.gilmanheartvalve.org).

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