ASX ANNOUNCEMENT
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HEARTWARE INTERNATIONAL SURPASSES 50 IMPLANTS IN THE US

Framingham, MA and Sydney, Australia, August 21, 2009 - HeartWare International, Inc. (NASDAQ: HTWR - ASX: HIN) today announced that HeartWare has surpassed 50 implants in the United States under its ADVANCE Clinical Trial, marking an important early enrollment milestone.

The 50th implant in the US was performed last week at the Texas Heart Institute in Houston, Texas by O.H. Frazier, MD a distinguished surgeon, scientist, and academician renowned for his research and development of new cardiovascular surgical techniques and ventricular assist devices. "We are very pleased with the early clinical results of this small pump. Its unique inflow cannula and small size enable us to place the device without a surgical pump pocket, which greatly reduces the risk of serious infection. The improved pump simplifies implantation and allows for optimal function, even in difficult cases where the myocardium is thin or the apex of the ventricle is difficult to access" said Dr. Frazier.

HeartWare's ADVANCE Clinical Trial is an FDA approved IDE study designed to evaluate the HeartWare® Ventricular Assist system as a bridge to heart transplantation for patients with end stage heart failure. The primary endpoint of the trial is survival at 180-days post surgical implantation. Under the IDE, a total of 150 patients will be enrolled across a maximum of 28 centers. Currently, 16 centers are enrolling patients. HeartWare expects the number of active centers to expand steadily over coming months as the balance of the 28 sites work through the steps required to begin enrolling patients.

About End Stage Heart Failure - Heart failure is one of the leading causes of death in the developed world. According to the American Heart Association, congestive heart failure (CHF) afflicts approximately 5 million people in the US with approximately 550,000 new cases diagnosed each year. Despite new treatment strategies for patients with end-stage heart failure, the number of patients who die with this disease is of epidemic proportion. Cardiac transplantation is currently the most effective therapy for the treatment of advanced end stage heart failure, however, its application is limited due to the lack of available donor organs.

Over the last decade, bridging to cardiac transplantation with implantable left ventricular assist devices (LVADs) has gained wider clinical acceptance and LVADs are used to extend life expectancy for patients with end-stage heart failure who might otherwise deteriorate while awaiting a donor heart.

About HeartWare International - HeartWare International develops and manufactures miniaturized implantable heart pumps, or left ventricular assist devices, to treat Class IIIb and Class IV patients suffering from advanced heart failure. The HeartWare® Ventricular Assist System features the HVAD™ pump, a small full-output circulatory support device (up to 10L/min flow) designed to be implanted next to the heart, avoiding the abdominal surgery generally required to implant competing devices. HeartWare has received CE Marking for the HeartWare® Ventricular Assist System in the European

Union. The device is currently the subject of a 150-patient clinical trial in the United States for a Bridge-to-Transplant indication.

HeartWare International, Inc. is a member of the Russell 2000(R) and its securities are publicly traded on The NASDAQ Stock Market and the Australian Securities Exchange.

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Forward-Looking Statements

This announcement contains forward-looking statements that are based on management's beliefs, assumptions and expectations and on information currently available to management. All statements that address operating performance, events or developments that we expect or anticipate will occur in the future are forward-looking statements, including without limitation our expectations with respect to the progress of clinical trials. Management believes that these forward-looking statements are reasonable as and when made. However, you should not place undue reliance on forward-looking statements because they speak only as of the date when made. We do not assume any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. We may not actually achieve the plans, projections or expectations disclosed in forward-looking statements, and actual results, developments or events could differ materially from those disclosed in the forward-looking statements. Forward-looking statements are subject to a number of risks and uncertainties, including without limitation those described in "Item 1A. Risk Factors" in our Annual Report on Form 10-K filed with the SEC on February 28, 2008, and those described in other reports filed from time to time with the SEC.