

**CELLADON ANNOUNCES PRESENTATION OF CLINICAL DATA FROM
FIRST-IN-HUMAN MYDICAR® TRIAL FOR ADVANCED HEART FAILURE AT
AMERICAN HEART ASSOCIATION SCIENTIFIC SESSIONS**

*Phase 1 Data Demonstrate Safety and Improvement
in Heart Failure in a Majority of Patients*

NEW ORLEANS, November 9, 2008 – Celladon Corporation announced today results from the first nine patients treated with MYDICAR®, a genetically-targeted enzyme replacement therapy for advanced heart failure, showing the product was safe and demonstrating improvement across a number of key parameters. Phase 1 data from the “Calcium Up-Regulation by Percutaneous Administration of Gene Therapy in Cardiac Disease (CUPID Trial), a First-in-Human Phase 1/2 Clinical Trial” were presented at the American Heart Association Scientific Sessions 2008.

This first phase of the multi-center trial was designed to investigate safety and biological effects of restoring SERCA2a enzyme activity in heart muscle cells. The enzyme levels are decreased in late stages of heart failure, and extensive research shows loss of SERCA2a levels represents a common pathway resulting in a defect in the ability of the heart to contract properly. Replacing the enzyme may restore function and reverse heart failure.

“The CUPID trial is the first to attempt to rescue a failing heart by replacing an enzyme known to play a critical role in normal cardiac muscle cell activity,” said Brian E. Jaski, M.D., Medical Director of Advanced Heart Failure, Sharp Memorial Hospital, San Diego Cardiac Center, San Diego, and a principal investigator on the study. “Our objective in this study is not only to improve the symptoms of heart failure, but restore physiologic function and reverse the severity of the disease in this chronic patient population.”

Celladon scientists, led by company co-founder Roger J. Hajjar, M.D., Director of the Cardiovascular Research Center at Mount Sinai School of Medicine, New York, developed MYDICAR for restoring the SERCA2a calcium transporter in heart failure and validated the overall beneficial effects on cardiac function. MYDICAR is a recombinant adeno-associated viral (rAAV) vector that transfers the SERCA2a gene into heart muscle cells. MYDICAR is delivered in a single dose directly to the heart muscle during a short outpatient procedure, performed in a standard cardiac catheterization laboratory via a small incision in the upper leg.

“These data demonstrate the safety of MYDICAR, and the improvements in cardiac function and overall condition observed in some patients further validate our target and approach,” said Krisztina M. Zsebo, Ph.D., Chief Executive Officer of Celladon. “Given these early encouraging results, we are excited to have been given clearance to move into phase 2 of our study to continue to evaluate the ability of MYDICAR to improve heart function in more patients.”

CUPID, which is funded by Celladon, is a Phase 1/2 trial. The Phase 1 portion reported today is an open-label, sequential dose escalation study. The Phase 2 portion is a randomized, double-blind, placebo-controlled, parallel-group, dose ranging trial that compares the use of MYDICAR at two or three dose levels with placebo. CUPID is expected to enroll 46 patients with advanced heart failure at 15 U.S. medical centers.

Study Results

Data from the Phase I in advanced heart failure was presented, and demonstrated that MYDICAR had an acceptable safety profile in these first nine patients, as determined by study investigators and an independent safety committee. In addition, improvements from baseline to six months across a number of parameters important in assessing heart failure status were observed, including symptomatic (5 patients), functional (4 patients), biomarker (2 patients) and left ventricular function/remodeling (6 patients). Of the nine patients treated, two with low levels of pre-existing antibodies to the AAV vector did not show improvement in these parameters.

The data are consistent with safety established for other rAAV vectors, which has been demonstrated in clinical studies of more than 500 patients. AAV vectors are the product of decades of research focused on the safety of gene transfer agents, and are derived from components of a non-replicating, non-pathogenic, commonly occurring human virus. AAV vectors do not integrate into the chromosome and are considered non-mutagenic. In addition, they have not been associated with the types of inflammatory reactions observed in trials involving adenoviral vectors, which are known to induce acute inflammation of tissues due to activation of the body's immune system.

About Heart Failure

Heart failure is the leading medical cause of hospitalization and is expected to result in estimated direct and indirect costs to the healthcare system in 2008 of \$35 billion. Despite important therapeutic advances in pharmacologic and device therapies, the prognosis of heart failure patients remains poor. Access to nonpharmacologic therapies, such as heart transplantation and the use of mechanical assist devices, is restricted to a fraction of patients who need them. About 5 million people in the United States have heart failure, and another 550,000 new cases are diagnosed each year. Heart failure contributes to or causes about 280,000 deaths annually. The most common symptoms of heart failure are shortness of breath, feeling tired, and swelling in the ankles, feet, legs, and sometimes the abdomen. There is no cure for heart failure.

About Celladon

Celladon was launched in October 2004 as a privately held biotechnology company founded with the goal of becoming the leader in developing molecular therapies for the treatment of heart failure. The company's products target the key enzyme deficiency in advanced heart failure, SERCA2a, which regulates calcium cycling and contractility in heart muscle cells. Celladon's first generation product candidate, MYDICAR, delivers the gene for the SERCA2a enzyme. MYDICAR is currently being tested in Phase 1 and 2 clinical trials. Celladon is also developing traditional small molecule activators of SERCA2a for the treatment of heart failure. The Company is based in La Jolla, California and founded by Roger J. Hajjar, M.D and Kenneth R. Chien M.D., Ph.D. Current investors include Enterprise Partners Venture Capital, Venrock Associates, and Johnson & Johnson Development Corporation. To learn more about Celladon, visit Celladon's website at www.celladon.net.

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