



**SYNERGY®, CIRCULITE'S MICRO-BLOOD PUMP, SHOWN TO PROVIDE
SUSTAINED IMPROVEMENTS IN CARDIAC FUNCTION AND EVIDENCE OF
MYOCARDIAL RECOVERY IN PATIENTS WITH CHRONIC HEART FAILURE**

**-Publication in Journal of the American College of Cardiology Demonstrates Clinical
Proof-of-concept and Will Support CE Mark Filing for Synergy for Long-term Partial
Circulatory Support in Chronic Heart Failure -**

SADDLE BROOK, N.J. (June 23, 2009) - CircuLite, Inc. today announced the publication of positive data from its ongoing CE Mark clinical trial for the Synergy® Pocket Micro-pump for chronic heart failure in the **Journal of the American College of Cardiology**. The data demonstrated that partial circulatory support with Synergy yielded statistically significant long-term improvements in cardiac function, hemodynamic benefits and evidence of myocardial recovery. These results were originally presented in a late-breaking session at the 2009 Annual Meeting of the American College of Cardiology. Synergy is a micro-blood pump, the size of a AA battery, that can be implanted superficially in a "pacemaker-like" pocket. Synergy is the first and smallest device designed for partial circulatory support (up to 3L/min) and long-term use in patients with Class IIIb and early Class IV heart failure.

Senior author, Daniel Burkhoff, M.D., Ph.D., Chief Medical Officer of CircuLite and Adjunct Associate Professor of Medicine at Columbia University Medical School, noted: "Data from the ongoing CE Mark trial continue to show that Synergy provides significant hemodynamic benefits to patients and prevents progressive hemodynamic deterioration. Synergy, with its small size and minimally invasive procedure, could result in quality-of-life improvements for patients - CircuLite's ultimate goal for this device."

"This publication provides another layer of scientific validation for the Synergy device and human proof-of-concept for its unique approach of providing long-term, partial circulatory support," said Paul Southworth, President and Chief Executive Officer of CircuLite. "We believe that Synergy offers a less-invasive alternative to full-support LVADs, expanding the potential population who could benefit from circulatory support devices to those patients with less-advanced disease who are hemodynamically compromised but are also not optimally addressed by current device- and drug-based therapies. We are currently pursuing CE Mark approval for Synergy and anticipate launching the device in Europe later this year."

At the time of its writing, the article details results for 17 patients (14 males) who were implanted with Synergy. Significant improvements in hemodynamics were observed in the first day of support. Additionally, 9 patients had since completed their follow-up right heart catheterization at a mean of 10 weeks, and the data demonstrate that the significant hemodynamic improvements

were sustained. Mean arterial pressure increased from 67 mmHg to 80 mmHg ($p=0.01$) and mean cardiac index increased from 2.0 to 2.8 L/min/m² ($p=0.01$). Large reductions in mean capillary wedge pressure were observed (30 to 18 mmHg, $p=0.001$). In addition, mean peak VO₂ increased from 9.7 to 14.1 ml/kg/minute. The median duration of patient support with Synergy was 81 days, with the longest support period of 213 days. Eighty-two percent (14/17) of patients were alive and nine received heart transplants. The study also demonstrated relatively quick patient recovery following the approximately 90 minute minimally invasive procedure.

The article, titled "Proof of Concept: Hemodynamic Response to Long-Term Partial Ventricular Support with the Synergy Pocket Micro-Pump," was published in the current print issue of the Journal of the American College of Cardiology (Volume 53, Issue 26, June 30, 2009). The study's authors were: Bart Meyns, M.D., Ph.D.; Stefan Klotz, M.D., Ph.D.; Andre Simon, M.D.; Walter Droogne, M.D.; Filip Rega, M.D.; Bartley Griffith, M.D.; Robert Dowling, M.D.; Mark J. Zucker, M.D.; and Daniel Burkhoff, M.D., Ph.D.

About Synergy®

The Synergy® Pocket Micro-pump represents a new approach to mechanical circulatory support that is designed to transform chronic heart failure management by providing a less-invasive, elective treatment option for patients before their disease state becomes emergent. Synergy is the first implantable system designed to provide partial circulatory support (PCS) for long-term use in millions of unserved patients that have NYHA Class IIIb/early IV disease.

CircuLite's patented micro-pump provides up to 3L/min of flow, which increases total cardiac output, offloads the heart, allowing it to rest, and potentially enables beneficial recovery of heart function. The size of a AA battery, the device is small enough to be implanted subcutaneously in a "pacemaker-like" pocket through a minimally-invasive procedure.

About CircuLite®

CircuLite is transforming heart failure treatment with the development of minimally-invasive devices for long-term partial circulatory support (PCS). By enabling a proactive and lower-risk treatment approach by supplementing a patient's native pumping capacity, CircuLite has the potential to improve the quality of life for millions of chronic heart failure patients and their families. CircuLite's pipeline of PCS devices is lead by the Synergy® Pocket Micro-pump, the world's smallest implantable blood pump, currently in a CE Mark clinical trial. Next-generation Synergy micro-pumps include an endovascular system, a fully-implantable system and a pediatric system. For more information on CircuLite and the Synergy Pocket Micro-pump devices, visit our website at www.CircuLite.net.

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