

New Results Report Advancements in Reprive-Guided Diuretic Therapy for Acute Heart Failure Patients

*Results Presented at Device Therapies for Heart Failure Congress Show Improved Ability to
Help Clinicians Remove Excess Fluid*

MILFORD, Mass. – December 19, 2018 – Reprive Cardiovascular™, a pioneering medical device company focused on improving outcomes for patients suffering from acute decompensated heart failure (ADHF), today announced new clinical study results demonstrating improvements in the ability of Reprive-Guided Diuretic Therapy to optimize fluid management for people with Acute Decompensated Heart Failure (ADHF). Study results were presented during the Device Therapies for Heart Failure Congress (D-HF), December 14-15, in Frankfurt, Germany.

Professor Piotr Ponikowski, Professor of Cardiology at Wroclaw Medical University, 4th Military Hospital in Wroclaw, Poland, presented early positive results from the **TARGET II Study**. Based on the success of a feasibility study known as TARGET I (presented at ESC-Heart Failure in May, 2018), TARGET II was designed to optimize fluid management using Reprive-Guided Diuretic Therapy in ADHF patients to achieve safe net volume reduction while significantly alleviating related symptoms. At D-HF, Prof. Ponikowski shared iterative improvements made to Reprive-Guided Diuretic Therapy. These improvements made in TARGET II led to an increase in the net fluid loss over the control group of TARGET I, from -1754 ml to -3661 ml, over 24 hours. Additional results from the TARGET II trial will be presented at future conferences.

“These results change the way we need to think about diuretic therapy,” said Piotr Ponikowski, Professor of Cardiology at Wroclaw Medical University, 4th Military Hospital in Wroclaw, Poland, and one of the lead investigators for this study. “The new results of this study are encouraging as they show we were able to safely increase the rate of fluid loss in decompensated heart failure patients using Reprive-Guided Diuretic Therapy.”

In addition, Dr. Howard Levin, Chief Medical Officer of Reprive Cardiovascular outlined the underlying physiology of Reprive-Guided Diuretic Therapy in a talk entitled “**Is Diuretic Resistance Curable?**” Dr. Levin described the challenges behind diuretic therapy, which is the current frontline therapy for ADHF patients: the inability to predict the patient’s response, risk of hypotension and/or acute kidney injury, and ultimately, the failure of diuretic therapy to lead to significant weight loss or volume removal in more than half of the treated patients. According to Dr. Levin, Reprive-Guided Diuretic Therapy may enhance the benefits of diuretic therapy – specifically fluid and sodium removal – while protecting against the negative impacts of diuretics by preventing excess net fluid and sodium loss.

“We are thrilled to reveal additional data that demonstrates a promising step towards a new therapy for patients suffering from Acute Decompensated Heart Failure. Reprive Cardiovascular’s fluid management technology may precisely enable the controlled decongestive therapy that ADHF patients need,” said Jim Dillon, CEO of Reprive



Cardiovascular. “Our Guided Diuretic Therapy (GDT) has the potential to establish a new frontline standard of care for heart failure patients, allowing physicians to maximize fluid removal while protecting patients from the potential negative impact of excessive fluid loss. At D-HF we continued to see overwhelming interest in our initial study and technology, similar to the interest we experienced at the Heart Failure Society of America meeting in September and ESC - Heart Failure 2018 in May.”

ADHF is a sudden onset of heart failure symptoms, which typically include difficulty breathing (dyspnea), swelling in the extremities, and fatigue. Current treatment for ADHF includes diuretic therapy that aims to restore healthy fluid levels in the kidneys and throughout the body. Diuretic therapy can be unpredictable and lose effectiveness as a patient’s condition worsens. In some patients, diuretics can trigger a condition called “diuretic resistance,” which blunts the function of diuretics and can worsen the severity of fluid overload, potentially resulting in acute kidney injury. Reprive-Guided Diuretic Therapy is designed and developed to allow clinicians to increase the dose of diuretics without increasing the risk of diuretic resistance, enabling safe and effective removal of excess fluid from ADHF patients and alleviation of symptoms.

About Reprive Cardiovascular’s Guided Diuretic Therapy

Reprive Cardiovascular’s Guided Diuretic Therapy is designed to manage fluids during diuretic therapy for patients with Acute Decompensated Heart Failure (ADHF), and may relieve a number of symptoms related to this condition. The therapy has the potential to enable precise and predictable management of a patient’s fluid levels, guarding against dangerous fluid imbalances and enabling better control over diuretic therapy, thus increasing the diuretic efficiency a patient experiences. Potential benefits include speeding decongestion while protecting core organ function, lessening of symptoms of congestive heart failure, such as shortness of breath, ascites, and swelling, reduced time in hospital, reduced readmission rates, and a better quality of life for the patient.

About Reprive Cardiovascular

Reprive Cardiovascular is a pioneering medical device company focused on innovative fluid management technologies for congestive heart failure. The company's Reprive technology is being investigated as an innovative fluid management treatment. Providing clinicians with the ability to precisely control a patient’s fluid volume may both enable improved cardiac care, as well as be instrumental in the decongestion of acutely decompensated heart failure patients (ADHF). Reprive Cardiovascular, Inc. and RenalGuard Solutions, Inc. are subsidiaries of parent company CardioRenal Systems, Inc. For more information, visit www.reprivecardio.com and follow Reprive Cardiovascular on Twitter at @RepriveCardio.

###



Media Contact:
Jana Chow
925-324-9846
Jana@healthandcommerce.com