



UNIVERSITY HOSPITAL
Newark, New Jersey

*****PRESS RELEASE*****

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**UNIVERSITY HOSPITAL'S NEW ARRHYTHMIA INSTITUTE
IMPLANTS FIRST MICRA AV DEVICE IN NJ**

The hospital's Arrhythmia Institute continues bringing state of the art heart technology to New Jersey. It was also the first in New Jersey to implant the Optimizer Impulse Dynamic, and will soon be the only center in the state offering the WiSE-CRT System

Newark, New Jersey – In honor of American Heart Month, University Hospital is proud to share progress that the newly established Arrhythmia Institute has made to push the boundaries for treating chronic heart failure in New Jersey. Last October, the Arrhythmia Institute was the first in the state, and second in the country, to successfully implant the Optimizer Impulse Dynamic device. Earlier this month it was once again the first in the state to implant the Micra AV device, the world's smallest pacemaker with atrioventricular (AV) synchrony.

The Arrhythmia Institute is also in the final stages of approval to be the only center in New Jersey to offer the WiSE-CRT System, which is designed to overcome the limitations of the existing CRT systems that deliver pacing stimulation outside the heart.

"I am incredibly grateful to work alongside such a hardworking and talented team here at the Arrhythmia Institute as we look towards implementing more leading-edge cardiac technology to better treat our patients," said **Dr. Emad F. Aziz, Director of the Arrhythmia Institute**. "Given the success we have seen with the Optimizer and Micra AV device implants, coupled with our progress toward final approval to begin offering the WiSE-CRT System, University Hospital is poised to lead the way in modern arrhythmia healthcare, not only in New Jersey, but in the field at large."

"When Dr. Aziz joined University Hospital, we had complete faith that he would create a state of the art electrophysiology program, but we could not have foreseen how quickly he and his team would be able to achieve so much in such a short time," said **Dr. Shereef Elnahal, President &**

CEO of University Hospital. “Our Arrhythmia Institute has quickly established itself as a provider for first rate cardiac care to patients in Newark and now, throughout New Jersey. We are excited to see how Dr. Aziz and the team will continue to drive the arrhythmia healthcare field forward into the future.”

Heart failure is a condition in which the heart isn’t able to meet the body’s needs, by either not filling up with enough blood, or being unable to produce enough force to pump blood throughout the body. Heart failure is a very common condition that over 5 million people in the United States have been diagnosed with. While there is no cure, innovative treatments help improve the quality of life for those living with heart failure.

Over the last seven months, the Arrhythmia Institute has established a number of unprecedented milestones for University Hospital. In addition to introducing brand new procedures in the state and reestablishing the Electrophysiology (EP) Laboratory as a leader in healthcare technology and services, they have also performed more than 440 procedures with no complications.

The Optimizer Impulse Dynamic device delivers timed electrical pulses called CCM (Cardiac Contractility Modulation) directly to the heart. CCMs trigger a host of physiological benefits such as increase in calcium uptake and improving cell metabolism and gene expression and decreasing common heart failure symptoms such as shortness of breath and fatigue.

The Micra AV device, which is implanted through a minimally invasive procedure, is used to treat patients with an atrioventricular block, in which the electrical signals between the atria and ventricle chambers of the heart are impaired. The Micra AV device, at one-tenth the size of a traditional pacemaker, has several additional internal atrial sensing algorithms to improve detection of cardiac movements. This allows the device to better adjust the electrical activity of the atrial and ventricle chambers providing “AV synchronous” pacing therapy, leading to increased blood flow from the left ventricle and an improved quality of life for patients.

The WiSE-CRT System, unlike other pacemakers, uses proprietary wireless technology to deliver endocardial stimulation, or pacing from inside the heart, to more accurately synchronize the pace of the left and right side of the heart. This approach gives the system more flexibility to be customized to best support each individual patient.

The Arrhythmia Institute’s success has extended the work of Electrophysiology service to other hospital services such as the ICU, sleep medicine, emergency medicine and stroke. Additionally, multiple practices from around the region, including Jersey City, Bayonne, Union, and Paterson are now sending their patients to University Hospital for EP services.

About University Hospital

University Hospital is part of one of the nation's leading academic medical centers and is the Level 1 Trauma Center for Northern New Jersey. Located at University Heights in Newark, University Hospital is a principal teaching hospital of Rutgers Biomedical and Health Sciences and a regional resource for advanced services across many medical specialties. For more information about University Hospital, please visit www.uhnj.org.