



New Data Shows Advantages of Acutus Medical Dipole Density Heart Imaging and Mapping System Compared to Standard Voltage-based Mapping in Patients with Atrial Flutter

May 19, 2015

Data Presented at Heart Rhythm Society's 36th Annual Scientific Sessions -SAN DIEGO, CA. May 15, 2015 – Acutus Medical, Inc., an innovative medical device company committed to revolutionizing the diagnosis and treatment of irregular and complex heart rhythm disorders, today presented data that shows the AcQMap™ High Resolution, Imaging and Mapping System generates a complete heart chamber electrical map that provides a four-fold improvement in resolution to record and display heart tissue function as compared to the standard voltage-based mapping used in patients with atrial flutter. The data was presented at the Heart Rhythm Society's 36th Annual Scientific Sessions held May 13-16, 2015 in Boston, Massachusetts. Today's EP mapping systems used during catheter ablation procedures capture and display a voltage field generated by heart tissue during activation. This voltage field records over a large area of heart tissue at each catheter placement and what is seen by the electrophysiologist (EP) is an average of all the tissue around the catheter, reducing the resolution. This makes it difficult for the EP to see the heart tissue in its "true" resolution and limits the possibility to map accurately and simply diagnosis irregular and complex arrhythmias.

The higher resolution image generated by the AcQMap System may open the possibility to truly map irregular heart rhythms with more precision and eliminate the unnecessary guesswork and lengthy procedures common today among even the most experienced electrophysiologist," said Stephan Willems, M.D., Ph.D., University Heart Center, University Hospital Eppendorf, Hamburg, Germany. "The data also shows the potential of the AcQMap System to change clinical practice and improve treatment outcomes in patients with irregular and complex heart rhythm disorders.

The AcQMap System is designed to generate real-time, 3-D images of the heart chamber with quality equivalent to a CT or MRI in a matter of minutes. The System can detect and display both the standard voltage based maps as well as the higher resolution dipole density maps. The result of combining highly accurate imaging with higher resolution mapping capabilities enables EP's to identify and locate the responsible tissue for the irregular heart rhythm, target treatment with pinpoint accuracy and minimize heart ablation.

Catheter ablation is a common treatment for heart rhythm disorders including atrial flutter and atrial fibrillation, but long-term success rates are low and limitations of voltage-based cardiac mapping technologies are in part to blame,

said Randy Werneth, President and Chief Executive Officer of Acutus Medical.

We believe the AcQMap System can fulfill a significant unmet need in the treatment of irregular and complex heart rhythm disorders and look forward to continuing to build a body of evidence that supports its utility in the electrophysiology lab.

About the Study

Data were collected from five of eight patients enrolled with atrial flutter to determine the difference in resolution of a dipole density map generated by the AcQMap System, to that of a standard voltage-based map. The AcQMap System was used to measure cardiac voltage, apply its dipole density algorithm and display electrical activation on the ultrasound constructed 3D anatomy, in real-time. A dipole density map and voltage-based map were created for each patient to show sinus rhythm, septal and lateral pacing and atrial flutter. The depolarized surface areas of each map were compared by study investigators and results showed that during atrial flutter, mean depolarized area for dipole density maps was 26.6 cm², significantly less than the voltage based maps, which were 83.2 cm². Overall the voltage-based map to dipole density map ratio was 4.1 for atrial flutter; 4.7 for SR; and 4.5 for pacing.

About Acutus Medical

Acutus Medical is an innovative medical device company developing a minimally invasive cardiac imaging and mapping system and catheters that have the potential to change clinical practice and improve patient outcomes in irregular and complex heart rhythm disorders. Acutus Medical is a privately held company located in San Diego, CA. You can learn more about the company at www.acutusmedical.mccdsgn.com.

About Atrial Flutter: A Heart Rhythm Disorder

Atrial flutter (AFL) is a common abnormal heart rhythm disorder in which the upper chambers of the heart beat too fast resulting in contractions of the atrial muscle that are out of sync with the lower chambers. AFL is similar to the more common atrial fibrillation (AF), which is an irregular and often rapid heart rate that commonly causes poor blood flow to the body. AF affects three million adults in the United States – and its prevalence is expected to rise to eight million by 2050. AF is a progressive condition and the likelihood of developing it increases with age. It's estimated that 1 in 20 adults aged 65 and older are living with AF.

Forward Looking Statements

This document includes forward-looking statements regarding Acutus Medical Cardiac Imaging and Mapping Technology System. Any statement describing Acutus Medical's goals, expectations, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement, including those statements that are described as Acutus goals. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing products and in the endeavor of building a business around such products. Acutus Medical's forward-looking statements also involve assumptions that, if they never materialize or prove correct, could cause its results to differ materially from those expressed or implied by such forward-looking statements. Although Acutus Medical forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Acutus Medical. As a result, you are cautioned not to rely on these forward-looking statements.

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