



AcQMap 8, Acutus Medical's Innovative Suite of Software Upgrades, Receives FDA Clearance and CE Mark

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Enhanced Software Automatically Identifies Regions of Interest During the Treatment of Complex Atrial Arrhythmias

CARLSBAD, Calif., Aug. 11, 2021 (GLOBE NEWSWIRE) -- [Acutus Medical, Inc.](#) (Nasdaq: AFIB) ("Acutus"), an arrhythmia management company focused on improving the way cardiac arrhythmias are diagnosed and treated, today announced its innovative suite of software upgrades, known collectively as AcQMap 8, has received FDA clearance and been awarded CE Mark. AcQMap 8 introduces advanced new mapping algorithms into Acutus' foundational technology, the AcQMap 3D imaging and mapping system. These algorithms – including AcQTrack™ and the SlowZone™ Locator (Composite Maps) – are designed to quickly highlight regions of interest during the mapping and ablation of complex atrial arrhythmias, the treatment of which has been shown to significantly improve patient outcomes.¹ The software upgrade also features a series of procedural workflow enhancements and seamless integration of Acutus' therapeutic ablation technologies, where currently available.

Unique to Acutus' full chamber non-contact mapping technology, which is capable of mapping individual beats in real-time, the AcQTrack mapping algorithm is engineered to automatically identify and analyze the presence of three abnormal conduction patterns (focal, partial-rotational and irregular) often associated with atrial fibrillation (AF). In clinical trials such as UNCOVER AF, when three to four of these abnormal conduction patterns were targeted for ablation, patients were nine times more likely to be in sinus rhythm after one year.¹ AcQTrack functions as an innovative tool that can fit seamlessly into electrophysiologists' diagnostic workflows and aid in their visual assessment of propagation history maps. Acutus will commence the rollout of AcQMap 8 immediately, update its current installed base of consoles and integrate AcQMap 8 into all new installations.

"We're seeing more and more clearly that the triggers and drivers for some of the most complex atrial arrhythmias lie beyond the reach of traditional pulmonary vein isolation treatment strategies," said Prof. Tim Betts, M.D., Oxford University Hospitals NHS Foundation Trust. "AcQMap's multiple algorithms, in combination with its non-contact full chamber mapping capabilities, allows me to better assess potential new areas of interest outside the pulmonary veins in order to achieve a more comprehensive assessment of complex atrial arrhythmias like atrial fibrillation. Algorithms like AcQTrack further extend my confidence to determine and execute treatment strategies specific to each individual patient, which has the potential to significantly improve patient outcomes."

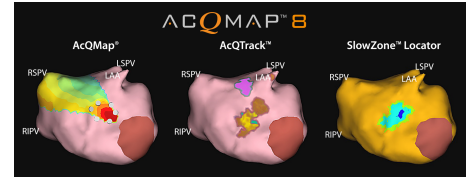
In addition to AcQTrack, the SlowZone Locator algorithm represents a pioneering advancement in substrate mapping. It is the first and only mapping algorithm that identifies consistent areas of slow conduction over the entire atrium. With the SlowZone Locator, physicians create one or more maps in the atria, which the algorithm then combines into one composite map for analyzing areas of consistent slow conduction in each patient.

"I believe these algorithmic functions will have a significant influence on our overall treatment strategies, particularly in complex arrhythmia cases like atrial fibrillation," said Sarah Hussain, M.D., Penn State Health, Hershey, Penn. "To be able to clearly see abnormal conduction patterns associated with AF while also having the opportunity to combine several full-chamber maps could provide us with brand new insights about the mechanisms of these complex atrial arrhythmias. We're looking forward to working with this technology and continuing our pursuit of more individualized therapy approaches for our patients."

AcQMap 8's software enhancements also facilitate the seamless integration of Acutus' AcQBlate FORCE Sensing Ablation Catheter and System* into the AcQMap system, enabling complete visualization and configuration of ablation procedures directly on the AcQMap system's user interface.

"Our goal is to give physicians the tools they need to efficiently and effectively treat complex arrhythmias like atrial fibrillation," said Vince Burgess, President and CEO, Acutus Medical. "We continue to push the boundaries of what's possible in the EP lab and take significant

AcQMap 8 Software with AcQTrack™ and SlowZone™ Locator



Case Example: Patient with Atrial Fibrillation

Left to right, AcQMap (with input from a clinical specialist), AcQTrack, and SlowZone Locator all independently identify conduction abnormalities in the same anatomical location, providing confidence that the overlapping areas may be contributing to the complex arrhythmia. Physicians can leverage these algorithms to personalize treatment and potentially improve outcomes.

AcQMap: Non-contact whole chamber propagation map uniquely enables visualization of cardiac activity during complex arrhythmias such as AF.

AcQTrack: Algorithm that automatically identifies abnormal conduction patterns that may be drivers and/or maintainers of complex arrhythmias such as AF.

SlowZone Locator (Composite Maps): Algorithm that automatically identifies zones of consistent slow conduction over multiple cycles or maps, which may sustain complex arrhythmias such as AF.

Acutus Medical's Fully Integrated Electrophysiology System



AcQMap 8 introduces seamless integration of

technological strides designed to improve patients outcomes. AcQMap 8's unique automated mapping algorithms and functionalities are a much-needed next step as we continue to drive innovation in the electrophysiology space and help physicians create optimized and personalized treatment strategies for all of their patients."

To learn more about Acutus Medical's complete portfolio of diagnostic, access and therapy products, please visit <https://acutusmedical.com>.

*AcQBlate FORCE is currently CE Marked. CAUTION: The AcQBlate FORCE Sensing Catheter and System are investigational devices and are limited by United States law to investigational use.

References

¹Willems, et al. "Targeting Nonpulmonary Vein Sources in Persistent Atrial Fibrillation Identified by Noncontact Charge Density Mapping – UNCOVER AF Trial." *Circulation: Arrhythmia and Electrophysiology*. Vol. 12, No. 7, 2019.

About Acutus Medical

Acutus Medical is an arrhythmia management company focused on improving the way cardiac arrhythmias are diagnosed and treated. Acutus is committed to advancing the field of electrophysiology with a unique array of products and technologies which will enable more physicians to treat more patients more efficiently and effectively. Through internal product development, acquisitions and global partnerships, Acutus has established a global sales presence delivering a broad portfolio of highly differentiated electrophysiology products that provide its customers with a complete solution for catheter-based treatment of cardiac arrhythmias. Founded in 2011, [Acutus](#) is based in Carlsbad, California.

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Acutus' AcQBlate FORCE Sensing Ablation Catheter and System* into the AcQMap® High Resolution Imaging and Mapping System, enabling a complete end-to-end cardiac ablation procedure with the AcQMap system. Physicians can leverage AcQMap's novel ultrasound imaging and non-contact whole chamber mapping algorithms together with a complete visualization and configuration of the ablation procedure to more efficiently and effectively diagnose and treat complex atrial arrhythmias.

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