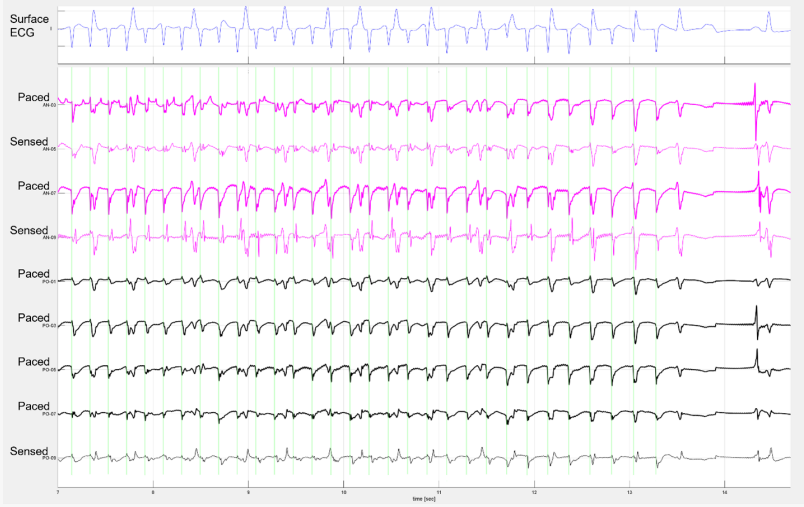
Maxwell Biomedical Completes First-in-Human Study Enrollment and Testing of Spatial Resynchronization™ Therapy

Spatial Resynchronization Therapy (SR™T) demonstrates proof-of-concept in repeatedly terminating atrial fibrillation (AFib) and restoring sinus rhythm



Successful Spatial Resynchronization™ Therapy (SRT) conversion of AFib to normal rhythm

SAN DIEGO, CALIFORNIA, UNITED STATES, October 20, 2022 /EINPresswire.com/ -- Maxwell Biomedical announced today that it has successfully completed enrollment in its First-in-Human Clinical Trial "Initial Experience with Spatial Resynchronization Therapy in Patients with Atrial Fibrillation (NCT 05461612)" being conducted at the Tbilisi Heart and Vascular Clinic in Tbilisi, Georgia. SRT is a device-based approach that features a proprietary algorithm for diagnosing and treating AFib. The graphic is one of several successful conversions of AFib to normal rhythm demonstrated during the recent study.

The idea of imperceptible stimulation to gain control of the arrhythmia and restore sinus rhythm in AFib patients is not new. The methodology, timing, and location of stimulus delivery represent the unique aspects of the Maxwell System. Once AFib is detected, instead of delivering pacing to a single site, SRT determines where to deliver stimuli across a spatially distributed network of electrodes placed on the epicardial surface of the left atrium. Pacing stimuli are precisely timed to be delivered within the excitable gap, allowing the system to capture and control the atrial tissue and restore the normal rhythm.

"We are extremely encouraged by the results from this most recent study," stated Randy Werneth, CEO of Maxwell Biomedical, "These latest results will further advance our System and SRT algorithm bringing us closer to delivering a device-based treatment for patients with all types of AFib."
Atrial Fibrillation

Atrial fibrillation is the most common heart arrhythmia affecting over 33 million patients worldwide.1 It occurs when the upper chambers beat uncontrollably and are out of synchronization with the lower chambers of the heart. The lack of coordinated contractions during prolonged episodes of AFib increases the likelihood of blood clot formation and reduces the amount of blood available to pump to the body. AFib increases stroke risk five times2 increases mortality rates two-fold in heart failure patients3 and costs the United States healthcare system $26B annually1. Current AFib treatment options include outpatient cardioversion, rate or rhythm control medications, and catheter ablation. SRT would offer patients a non-destructive, minimally invasive option to treat their AFib.

About Maxwell Biomedical
We are a development-stage, science-driven, innovative medical technology company with outstanding people dedicated to advancing long-term solutions for patients with Atrial Fibrillation. Maxwell is developing a first-of-its-kind atrial pacing device that automatically detects AFib and imperceptibly delivers SRT to restore and maintain a normal heart rhythm. Device monitoring and cloud connectivity ensure active and continuous patient care and management. Founded in 2019, Maxwell Biomedical is based in San Diego, CA.
www.maxwellbiomed.com

Sources
Maxwell Biomedical
1. Chugh SS et al. Worldwide epidemiology of atrial fibrillation. A global burden of disease study 2010. Circulation;129:2014.
2. Virani SS et al. Heart disease and stroke statistics – 2021 update: a report from the American Heart Association. Circulation;143:2021.
3. Chamberlain AM et al. Atrial Fibrillation and Mortality in Heart Failure. Circ: Heart Failure;4(6):2011.

Randy Werneth
Maxwell Biomedical
+1 858-877-3070
email us here
