NEWS RELEASE

Thermedical Awarded $3 Million NIH Grant to Study Promising Treatment for Ventricular Tachycardia, a Leading Cause of Sudden Cardiac Death

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Novel SERF Ablation to be showcased at International Symposium on Ventricular Arrhythmias: Pathophysiology & Therapy

WALTHAM, Mass.--(BUSINESS WIRE)-- **Thermedical®**, a developer of thermal-ablation systems to treat ventricular arrhythmias, announced today it has received $3 million in grant funding (1R44HL169112) from the National Heart, Lung, and Blood Institute, a part of the National Institutes of Health, to fund its FDA-approved **clinical trial** at seven centers in the U.S. and Canada using the SERF Ablation System with the Durablate® Catheter to treat ventricular tachycardia (VT). VT is an abnormally rapid heart rhythm that is a leading cause of sudden cardiac death worldwide. Sudden cardiac death kills 325,000 adults in the U.S. every year1.

The company also announced it will showcase its novel Saline Enhanced Radiofrequency (SERF) Ablation System with the Durablate Catheter at the 18th Annual International Symposium on Ventricular Arrhythmias: Pathophysiology & Therapy, October 13–14, 2023, at the Bellevue Hotel Philadelphia.

“We are honored to receive this generous grant from the NIH to fund the treatment of VT using our SERF Ablation System in patients who have run out of treatment options for their VT episodes,” said **Michael Curley**, Ph.D., FHRS, co-founder and CEO of Thermedical. “In our most recent multi-center trial, 38 of 41 participants experienced immediate elimination of their clinical VT at the end of the procedure, and therapies such as shock or pace regulation were either substantially reduced or completely eliminated in 73% of these patients during the six-month follow-up.”

SERF ablation with the **Durablate catheter** is being evaluated as a treatment option for patients with ventricular arrhythmias resistant to antiarrhythmic drugs or standard ablation procedures. SERF ablation provides a new, more efficient form of biological heat transfer than conventional ablation methods. The Durablate catheter delivers energy with a high level of accuracy to treat tissue deeper in the heart wall where life-threatening arrhythmias that cause VT are often located.

"Episodes of ventricular tachycardia reduce the quality of life for many patients with implantable defibrillators," said William G. Stevenson, Professor of Medicine, Vanderbilt University Medical Center. "SERF ablation is a new approach that has the potential to improve treatment of this arrhythmia. This trial will provide important information about the safety of this promising approach and offer hope to people whose VT has not been controllable with available therapies."

Implantable Cardioverter Defibrillators (ICDs)—electronic devices that continually monitor a patient's heart rhythm—are the current treatment for patients suffering from VT. During a VT episode, the ICD delivers energy to the heart muscle via a powerful shock or antitachycardia pacing to help the heart beat normally again. Today, VT patients with ICDs who experience VT episodes may be treated with conventional RF ablation, a lengthy procedure with a moderate success rate of approximately 50%.

About Thermedical

Thermedical is a privately held company founded by Massachusetts Institute of Technology (MIT) Hyperthermia Center alumni Michael G. Curley, Ph.D., and Patrick S. Hamilton, Ph.D., based in Waltham, Mass. Under a Massachusetts Life Sciences Center Small Business Matching Grant (SBMG) Award, multiple NIH Small Business Innovation Research (SBIR) Grants, and Series A venture funding, the company has developed thermal-ablation systems to treat ventricular tachycardia (VT) and solid tumors. For more information, visit **www.thermedical.com**.

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1 **https://www.webmd.com/heart-disease/sudden-cardiac-death**

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