



C A R D I A L E N<sup>®</sup>

## Cardialen Awarded \$3 Million Federal Grant to Advance Therapy Designed to Treat Atrial Fibrillation for Improved Heart Failure Outcomes

**National Institutes of Health grant will support Cardialen's development of its implantable, low-energy therapy designed to treat atrial fibrillation, a cardiac arrhythmia associated with debilitating shortness of breath, fatigue, pain, and an increased risk of stroke.**

Minneapolis, Sept. 16, 2021 – [Cardialen](#), Inc., has been awarded a \$3 million National Institutes of Health (NIH) Phase IIb SBIR grant for the development of an implantable, low-energy therapy for the cardioversion of atrial fibrillation (AF). The grant was awarded after an expert panel of cardiologists, scientists, and engineers gave the Cardialen therapy an exceptional peer review as part of a highly competitive grant process.

Professor Prash Sanders, Director of the Centre for Heart Rhythm Disorders, Adelaide Medical School, Australia, is the principal investigator of Cardialen's *MultiPulse Therapy*<sup>™</sup> (*MPT*<sup>™</sup>) for AF trial. "Atrial fibrillation remains a serious arrhythmia, and additional treatment options are needed," said Professor Sanders. "Maintaining atrial fibrillation rhythm control in heart failure patients has shown to provide significant quality of life, mortality and hospitalization benefits. Cardialen's MultiPulse Therapy could provide another important tool for patients receiving a CRT-D device."



# C A R D I A L E N<sup>®</sup>

Atrial fibrillation, commonly known as A-fib, is an irregular and rapid heart rate that can lead to patient discomfort and increased risk of stroke. Approximately 34 million patients suffer from this condition worldwide.<sup>1</sup> Approximately 26% of ICD patients,<sup>2</sup> and 36% of CRT-D patients,<sup>3</sup> receiving an implantable cardiac defibrillator have, or will likely experience, atrial fibrillation. Cardialen seeks to provide a therapy for those patients already receiving an implantable cardiac resynchronization therapy defibrillator device.

## About Cardialen

Cardialen, Inc. is a Minneapolis-based medical device company developing implantable, low-energy defibrillation and cardioversion therapy designed to treat dangerously fast heart rhythms, including ventricular tachycardia and ventricular fibrillation, in addition to treating atrial fibrillation. Cardialen's MultiPulse Therapy™ (MPT™) uses a patented sequence of low-energy pulses to restore normal heart rhythm more gently than high-energy, often painful, shocks used for atrial fibrillation and ventricular fibrillation. Learn more at [www.cardialen.com](http://www.cardialen.com).

The experimental MultiPulse Therapy is not currently available for use in the United States

## Contact Information

Michael Walsh  
612-718-8952

[Michael@MichaelWalshCommunications.com](mailto:Michael@MichaelWalshCommunications.com)

## References:

1. Chugh SS, Havmoeller R, Narayanan K, et al. Worldwide epidemiology of atrial fibrillation: A global burden of disease 2010 study. *Circulation*. 2014;129(8):837-847. doi:10.1161/CIRCULATIONAHA.113.005119



C A R D I A L E N<sup>®</sup>

2. Mustafa U, Dherange P, Reddy R, et al. Atrial Fibrillation Is Associated With Higher Overall Mortality in Patients With Implantable Cardioverter-Defibrillator: A Systematic Review and Meta-Analysis. *J Am Heart Assoc.* 2018;7(22). doi:10.1161/JAHA.118.010156
  
3. Mustafa U, Atkins J, Mina G, et al. Outcomes of cardiac resynchronisation therapy in patients with heart failure with atrial fibrillation: A systematic review and meta-analysis of observational studies. *Open Hear.* 2019;6(1):1-12. doi:10.1136/openhrt-2018-000937