

## BACKGROUNDER

# CCM Therapy — A New and Effective Option for Millions of Heart Failure Patients

- **CCM therapy is an innovation** that can improve the lives of many heart failure patients who continue to experience symptoms despite receiving medical therapy.<sup>1</sup>
- **The therapy is a new option** that improves the quality of life for patients who are no longer adequately responding to medications to manage symptoms or slow the progression of heart failure.<sup>1</sup>
- **CCM therapy may be an** appropriate treatment option for approximately 70 percent of NYHA Class III heart failure patients who remain symptomatic despite guideline-directed medical therapy.<sup>1</sup>



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*Hope is Here*

## CCM Therapy: A Breakthrough Approach

- CCM therapy is delivered by the Optimizer, a minimally invasive, implantable device. The innovative treatment is the first of its kind designed to improve contraction of the heart, allowing more oxygen-rich blood to reach the body.<sup>1</sup>
- Studies evaluating the FDA-approved therapy have demonstrated the device is safe and is proven to improve quality of life for suitable patients.<sup>1</sup>
- The Optimizer delivers cardiac contractility modulation, the company's proprietary technology, to the heart.<sup>1</sup>
- CCM therapy provides precisely timed electrical pulses to the heart during the absolute refractory period of the beating cycle, just after the heart contracts.
- The approach was proven safe and effective in numerous clinical studies, including several randomized controlled trials. The results have been published in over 80 articles appearing in leading medical journals.<sup>2</sup>
- The Optimizer system was granted "Breakthrough Device" designation by the FDA and is the first and only FDA-approved (as of March 2019) device in the United States or elsewhere to offer CCM therapy.
- The Optimizer has been used to treat over 5,500 patients. It is currently available in the United States, Europe (obtained CE Mark in October 2016), China, Brazil, India, and more than 40 other countries worldwide.



### References

- 1 Abraham WT, Lindenfeld JA, Reddy VY, et al. A randomized controlled trial to evaluate the safety and efficacy of cardiac contractility modulation in patients with moderately reduced left ventricular ejection fraction and a narrow QRS duration: Study rationale and design. *Journal of Cardiac Failure*. 2015;21(1):16-23. doi:10.1016/j.cardfail.2014.09.011
- 2 Kuschyk J, Falk P, Demming T, et al. Long-term clinical experience with cardiac contractility modulation therapy delivered by the optimizer smart system. *European Journal of Heart Failure*. 2021. doi:10.1002/ejhf.2202

**64 Million Adults Worldwide Have Heart Failure**

*We're determined to do something about it!*