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Social Media (data subject to change)



1,400 + followers



800 + followers



7,700 + followers



13,100 + followers



100+ videos



Hope is Here

About Us

Impulse Dynamics is a fast-growing medical device company that has pioneered a new form of therapy for heart failure called cardiac contractility modulation.

This treatment, which is provided by the company's Optimizer[®] **CCM**[®] therapy delivery system, is FDA-approved and designated as a *breakthrough* device. CCM is a first-of-a-kind, proprietary, life-changing treatment alternative for a vast population of heart failure patients worldwide.

Our Vision

We are driven with an unwavering commitment to significantly improve the lives of heart failure patients using cardiac contractility modulation.

Corporate Mission

Driven to bring hope and a new path of help for heart failure patients across the globe, we designed a framework of achieving goals by:

- Striving for excellence in all daily work.
- Abiding by all regulatory requirements.
- Facilitating global access to our therapy.
- Exceed expectations of patients and caregivers.
- Foster innovation, honesty, and accountability.
- Cultivate an environment attracting outstanding talent.
- Build significant value for our shareholders.

64 Million Adults Worldwide Have Heart Failure

We're determined to do something about it!

BACKGROUND

CCM[®] Therapy Delivered by
the Optimizer[®] System

◆ The Unmet Need: Heart Failure

- ◆ CCM Therapy:
A Breakthrough Approach
- ◆ CCM Therapy:
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- ◆ How it Works
- ◆ Is the Optimizer like a
pacemaker or defibrillator?
- ◆ Improving the Lives of Heart
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- ◆ Speak With Your
Healthcare Provider
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The Unmet Need: Heart Failure

- Heart failure affects an estimated 6.5 million Americans and nearly 64 million people worldwide.¹
- By 2030, over 8 million people in the United States — one in every 33 — will have HF.²
- Heart failure is a condition in which the heart slowly weakens and cannot pump with force required to supply oxygen-rich blood to meet the body's needs.
- Patients with heart failure experience debilitating symptoms, including breathlessness, fatigue, confusion, and swelling in the legs that make everyday activities challenging and significantly diminish their quality of life.
- Traditional treatments for heart failure provide limited, or no, improvement to the heart's pumping forcefulness, and nearly 50 percent of people with heart failure die within five years of being diagnosed.²
- Today, most heart failure patients are prescribed medications intended to slow the progression of the disease and manage their symptoms.
- As the condition progresses, these treatments lose their effectiveness, and the quality of life for heart failure patients will continue to decline.
- The total annual cost for heart failure is projected to reach \$70 billion by 2030.²

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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.³
- Studies evaluating the FDA-approved therapy have demonstrated the device is safe and is proven to improve quality of life for suitable patients.³
- The Optimizer delivers cardiac contractility modulation, the company's proprietary technology, to the heart.³
- 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.⁴
- 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.



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IMPULSE
DYNAMICS

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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.³
- 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.³
- 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.³



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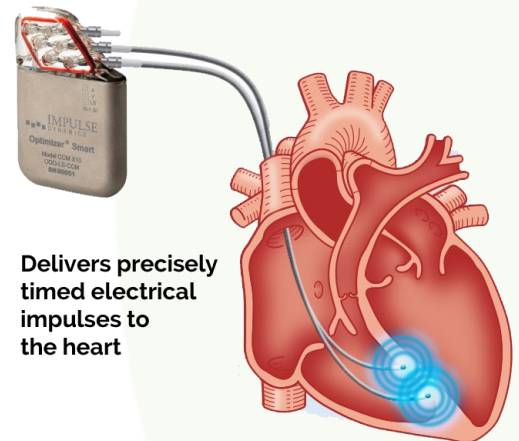


IMPULSE DYNAMICS

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How it Works

- The Optimizer device is similar in size to a pacemaker and is implanted during a minimally invasive procedure while the patient is under light sedation.
- During the procedure, the device is implanted under the skin of the upper chest, along with electrical leads placed in the heart's right ventricle through the veins (transcatheter).
- After the procedure, the physician programs the delivery of CCM therapy for each patient and activates the device.
- The implanted device then sends electrical pulses to the heart muscle for a total of five hours a day, in one-hour treatments separated by regular intervals.
- From the comfort of their home, the patient charges the device each week for one hour using an external charger.
- The Optimizer has been rigorously tested, and it is expected to provide CCM therapy for up to 15 years before requiring replacement.



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Is the Optimizer like a pacemaker or defibrillator?

- In some ways, yes, for example, both are implanted under the skin of the upper chest, and they each use leads to deliver therapy to the heart muscle. But that's where the similarities end.
- Unlike a pacemaker or defibrillator, Optimizer devices deliver CCM therapy during the cardiac cycle's non-excitatory or absolute refractory period. Instead of causing a contraction, CCM therapy is designed to cause subsequent beats of the heart to be stronger or more forceful, resulting in more oxygen-rich blood to be delivered to the body with each beat.
- A pacemaker is used to treat slow heart rhythm disturbances, which are symptomatic. Defibrillators can do that and can deliver lifesaving therapy if and when patients experience life-threatening electrical disturbances called arrhythmias. Cardiac contractility modulation is used to treat patients with heart failure to make their hearts beat stronger and make them feel better.



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Improving the Lives of Heart Failure Patients Through CCM Therapy

- Impulse Dynamics is dedicated to improving people suffering heart failure by transforming how the condition is treated.
- CCM therapy, which is delivered by the company's Optimizer system, is a breakthrough, FDA-approved treatment that is proven to improve the quality of life for heart failure patients.³
- CCM therapy is a safe and effective minimally invasive treatment option for many heart failure patients who otherwise have few effective options available to them.³
- The company is headquartered in Marlton, New Jersey, and has offices in Pearl River, New York, and Frankfurt am Main, Germany.



- Visit ImpulseDynamics.com or follow the company on [LinkedIn](#), [Facebook](#), [Twitter](#), and [Instagram](#) to learn more.
- As of the date of this publication, the company has several hundred employees and is aggressively hiring talent weekly to fill critical roles in the organization.

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Speak With Your Healthcare Provider

CCM[®] therapy is an FDA-approved and designated “Breakthrough” heart failure treatment.

- ✔ Can improve quality of life⁵
- ✔ Can improve functional status⁵
- ✔ Works differently than medications
- ✔ FDA-approved minimally invasive procedure

As with any medical procedure, individual results may vary. Speak with your cardiologist about the benefits and risks before moving forward with any treatment. While rare, adverse events can include infection, bleeding, chest pain, arrhythmias, tissue damage, worsening heart failure, stroke, and death.

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