



The Stern Cardiovascular Center
EXCELLENCE IN CARDIOVASCULAR MEDICINE, RESEARCH AND PATIENT CARE

OPTIMIZER™ System Fact Sheet

The Optimizer™ System is designed for the treatment of patients with moderate to severe heart failure. Heart failure is caused by a weak or damaged heart that is unable to pump adequate amounts of blood throughout the body.

Optimizer™ technology is based on a new method known as Cardiac Contractility Modulation (CCM). CCM is a method for treating failing hearts in which non-excitatory impulses are delivered to the heart during a period of time called the absolute refractory period (ARP). Therefore, these signals do not initiate the heart to beat (like a pacemaker would do). Rather, these signals are intended to modify heart cell function in a manner that is being tested as a treatment of heart failure.

The OPTIMIZER™ System consists of a programmable implantable pulse generator (IPG), a portable programmer and percutaneous leads delivered to the heart similar to pacemaker leads. These leads connect the IPG system to the heart. The implantable pulse generator produces CCM signals intended to influence heart muscle function, and the portable programmer allows medical personnel to customize the OPTIMIZER™ signal parameters according to each patient's needs.

The OPTIMIZER™ CCM therapy is applicable to a wide range of CHF patients, regardless of etiology, and the treatment is intended to be additive to the benefits of standard pharmacologic treatments for heart failure.