What is a CRT-D?

 CRT-D stands for cardiac resynchronization therapy defibrillator. A CRT-D is a small, battery-powered device that holds a tiny computer. It is implanted in the body to provide special pacing therapy to treat heart failure. It can also detect and treat both fast and slow heart rhythms. Your doctor programs your CRT-D to respond appropriately based on your individual heart rhythm needs.

Treating dyssynchrony

In heart failure, the chambers of the heart do not contract quite as they should. They are dyssynchronous, or out of rhythm. When that happens, your heart cannot provide your body with the blood flow it needs to function properly. Cardiac resynchronization therapy (CRT) is designed to help your heart pump better. It delivers specially timed electrical impulses to coordinate, or resynchronize, the timing of your heart’s contractions. This can help restore your heart’s pumping function or ability to fill with blood and work more efficiently.

Treating fast heart rhythms

If a dangerously fast ventricular heart rhythm occurs, your ENERGEN CRT-D can deliver lifesaving therapy. Depending on your condition, the CRT-D may deliver small but rapid electrical signals called antitachycardia pacing (ATP). Or it may deliver a full-energy shock. These therapies are designed to return your heart rhythm to normal.

Treating slow heart rhythms

If an abnormally slow heart rhythm occurs, your ENERGEN CRT-D can act like a pacemaker to deliver small electrical signals that help your heart beat more normally. Your CRT-D can also help increase your heart rate to meet your body’s needs when you are active.

How small is my CRT-D?

<table>
<thead>
<tr>
<th>Model</th>
<th>Height</th>
<th>Width</th>
<th>Thickness</th>
<th>Weight</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>N141</td>
<td>3.13 in</td>
<td>2.43 in</td>
<td>0.39 in</td>
<td>2.54 oz</td>
<td>32.5 cc</td>
</tr>
<tr>
<td></td>
<td>7.95 cm</td>
<td>6.17 cm</td>
<td>0.99 cm</td>
<td>72 g</td>
<td></td>
</tr>
<tr>
<td>N140</td>
<td>3.00 in</td>
<td>2.43 in</td>
<td>0.39 in</td>
<td>0.39 in</td>
<td>32 cc</td>
</tr>
<tr>
<td></td>
<td>7.70 cm</td>
<td>6.17 cm</td>
<td>0.99 cm</td>
<td>0.99 cm</td>
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</tr>
</tbody>
</table>

How long will my CRT-D last?

Like anything that operates on a battery, the life of your CRT-D will depend on how much the battery is used. The battery is used every time your device delivers therapy. So the amount of therapy you receive, and the amount of energy your doctor programs into those therapies, affects the life of the battery. An ENERGEN CRT-D is projected to last up to 5–8 years.
What happens after my implant procedure?

Care and recovery at home
Your doctor or nurse will give you specific instructions to follow when returning home. Full recovery from surgery can take from several days to a few months, depending on your condition. It is important that you are actively involved in your own recovery. Follow your doctor’s instructions about caring for the implant site and letting your other doctors, dentists, and emergency personnel know that you have an implanted CRT-D system.

Follow-up visits
Once you have a CRT-D, it is important to follow your doctor’s guidelines for follow-up visits. These typically occur every 3 months. Your doctor uses the follow-up visits to check your device and monitor your heart condition, which can change over time. Your doctor may also adjust your device settings.

If you are enrolled in the LATITUDE™ Patient Management System, your doctor can check your ENERGEN CRT-D remotely between visits.

Important Safety Information

Cardiac Resynchronization Therapy Devices
Cardiac resynchronization therapy pacemakers (CRT-P) and defibrillators (CRT-D) are designed to treat heart failure patients who may or may not have symptoms or who may have symptoms despite the best available drug therapy. They are also designed to help your heart pump more effectively and meet your body’s need for blood flow. These devices are sensitive to strong electromagnetic interference (EMI) and can be affected by certain sources of electric or magnetic fields. With all medical procedures there are risks associated. In regard to an implanted ICD, the risks include but are not limited to inappropriate shock, lead moves out of place, loss of stimulation capability, allergic reaction, fluid underneath the skin, and infection. In rare cases device failure or death can occur. Be sure to talk with your doctor so that you thoroughly understand all of the risks and benefits associated with the implantation of this system. To obtain a copy of the device Patient Handbook for more detailed device safety information, go to www.bostonscientific.com, or you can request a copy by calling 1-866-484-3268 or writing to Boston Scientific, 4100 Hamline Ave. N., St. Paul, MN 55112.

Device Quality and Reliability
It is Boston Scientific’s intent to provide implantable devices of high quality and reliability. However, these devices may exhibit malfunctions that may result in lost or compromised ability to deliver therapy. Refer to Boston Scientific’s CRM product performance report on www.bostonscientific.com for more information about device performance, including the types and rates of malfunctions that these devices have experienced historically. While historical data may not be predictive of future device performance, such data can provide important context for understanding the overall reliability of these types of products. Also, it is important that you talk with your doctor about the risks and benefits associated with the implantation of a device.

(Rev. K)