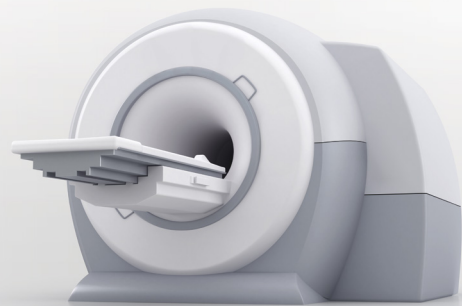


**EXPANDED
MRI ACCESS**

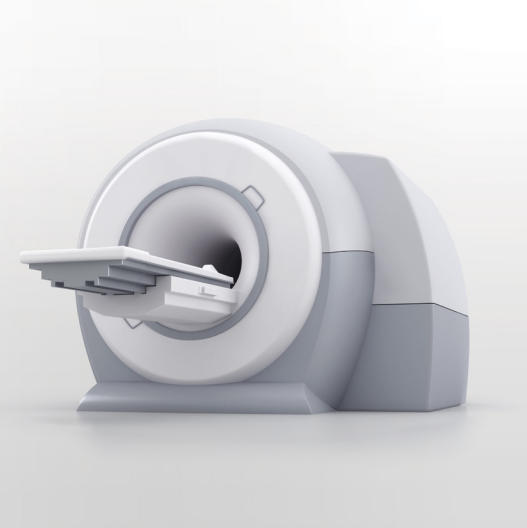


**ADVANCED
QUADRIPOlar
CRT-D
TECHNOLOGIES**



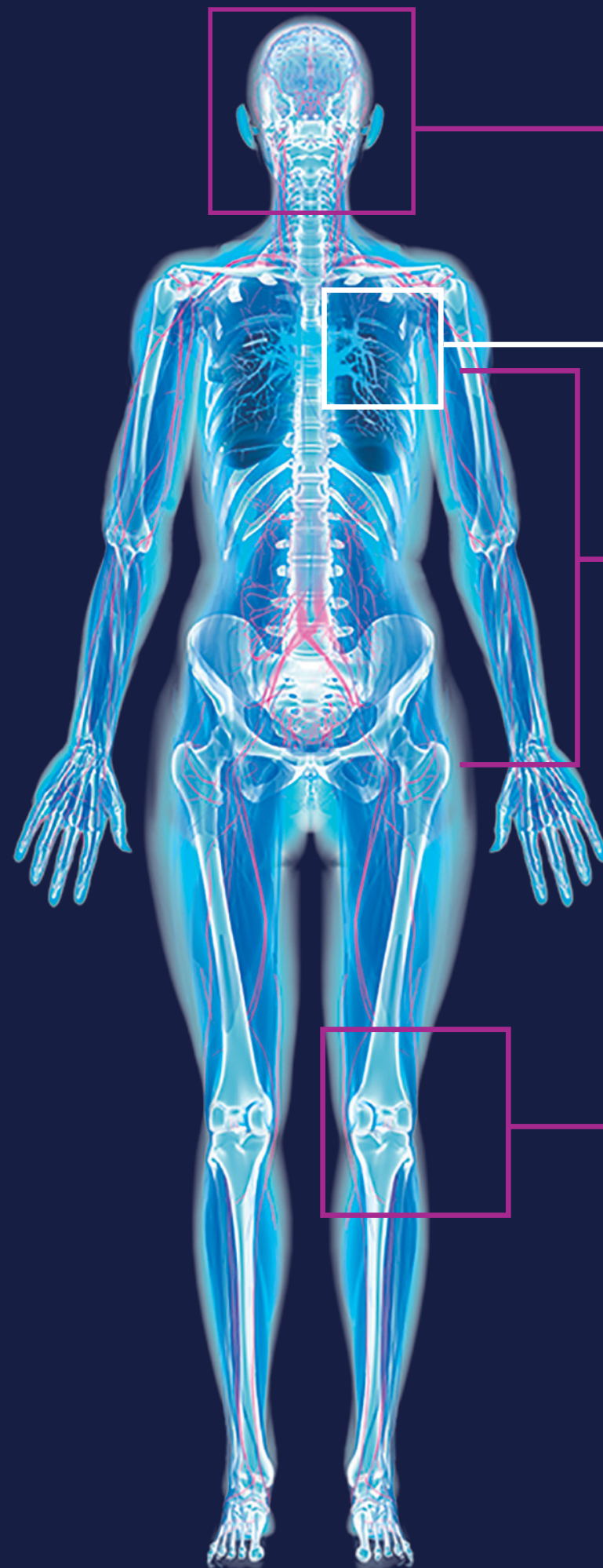
Compia MRI™
Quad CRT-D SureScan™

Medtronic



CRT PATIENTS ARE NOT RECEIVING MRIs

41%
of CRT patients are likely to have an MRI ordered over 4 years¹



Stroke patients with a CRT are not getting optimal diagnostic imaging

28% of non-CRT patients undergo an MRI within 3 days of stroke or TIA diagnostic vs. **0.5%** of patients with a traditional CRT.¹

Back Pain

16% of non-CRT patients undergo an MRI within 30 days of back pain diagnosis vs. **0.2%** of patients with a traditional CRT.¹

Joint Pain

(Knees, ankles, elbows, shoulders & wrists)

12% of non-CRT patients undergo an MRI within 30 days of joint pain diagnosis vs. **0.2%** of patients with a traditional CRT.¹

Cardiac Scans

Cardiac MRI is an ideal technique for monitoring disease progression and the effects of treatment on heart failure.²

EXPANDED MRI ACCESS

WITH COMPIA MRI,
PATIENTS HAVE ACCESS TO
1.5T AND 3T FULL BODY SCANNING

3T imaging provides higher resolution images³⁻⁵

BUILT TO BE SCANNED

Our SureScan™ devices and leads work in any combination to provide simplified scanning conditions

We engineered our devices with enhancements to ensure patient safety against:

- ✓ Force, torque and heating
- ✓ Unintended cardiac stimulation
- ✓ Device interactions in the MRI



**SIMPLE
SCANNING
CONDITIONS**

No MRI
exclusion
zone

No MRI
duration
restriction

No patient
height
restrictions

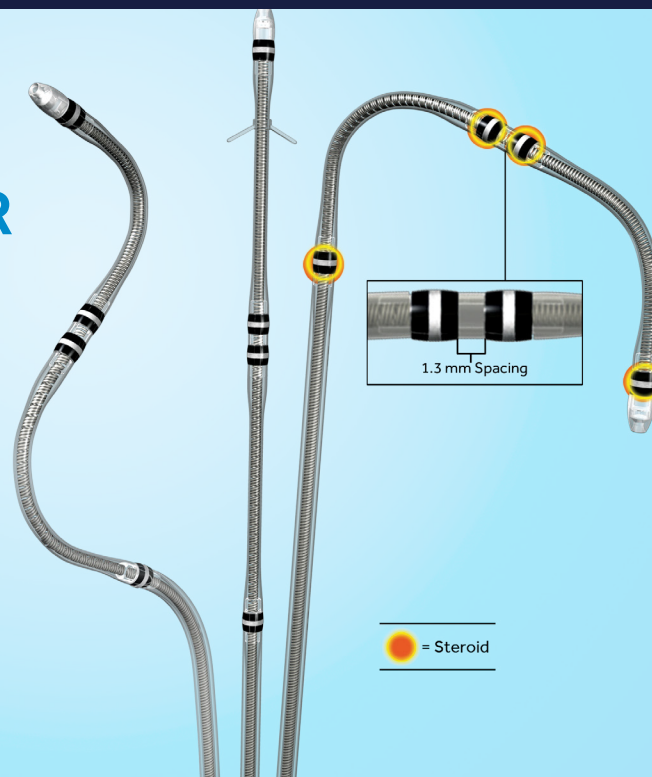
SureScan
devices and
leads work in
any combination

1.5T and 3T
full body
scanning

ADVANCED QUADRIPOlar CRT-D TECHNOLOGIES

ONLY THE ATTAIN™ PERFORMA™ ADVANCED QUADRIPOlar LEAD OFFERS

- 3 shapes for varying patient anatomies
- Short bipolar spacing to reduce phrenic nerve stimulation occurrence
- Steroid on all electrodes
 - Improves thresholds
 - Maximises longevity
 - Enables basal pacing



Other Quadripolar LV Lead with Wide Electrode Spacing

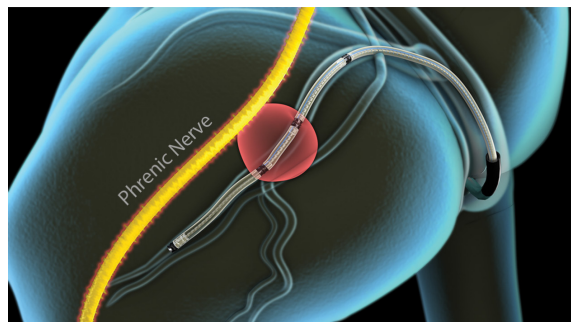


Illustration of wide electrode spacing with larger electrical field, phrenic nerve stimulated.

Attain Performa with Short Bipolar Spacing

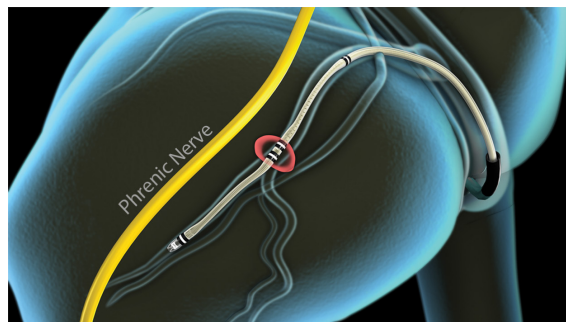


Illustration of short bipolar spacing with smaller electrical field, phrenic nerve not stimulated.

VECTOREXPRESS™

Only VectorExpress offers information from all vectors to make the best therapy choice—in two minutes

MAXIMISE LONGEVITY

Compare vectors at a glance and see longevity impact per vector.

LV Test Results				
LV Pace Polarity		LV3 to LV1	LV Amplitude	2.00 V
Sort by		LV Pace Polarity	LV Pulse Width	0.40 ms
LV Pace Polarity	Relative Longevity	Capture Threshold	Last Impedance	Phrenic Nerve Stim Present?
LV1 to RVcoil	5 months less	0.75 V @ 0.40 ms	418 ohms	No
LV1 to LV2	2 months less	1.00 V @ 0.40 ms	646 ohms	No
LV1 to LV3	2 months less	1.00 V @ 0.40 ms	665 ohms	No
LV1 to LV4	3 months less	1.00 V @ 0.40 ms	608 ohms	No
LV2 to RVcoil	1.2 years less	1.25 V @ 0.40 ms	399 ohms	Yes: 3.00 V @ 0.40 ms
LV2 to LV1	9 months less	1.50 V @ 0.40 ms	646 ohms	No
LV2 to LV3	1.0 years less	1.50 V @ 0.40 ms	513 ohms	No
LV2 to LV4	10 months less	1.50 V @ 0.40 ms	589 ohms	No
LV3 to RVcoil	1.2 years less	1.25 V @ 0.40 ms	399 ohms	Yes: 4.00 V @ 0.40 ms
LV3 to LV1	Maximum	0.50 V @ 0.40 ms	665 ohms	No
LV3 to LV2	1.0 years less	1.50 V @ 0.40 ms	513 ohms	No
LV3 to LV4	10 months less	1.25 V @ 0.40 ms	551 ohms	No
LV4 to RVcoil	2.7 years less	2.25 V @ 0.40 ms	304 ohms	No
LV4 to LV1	1.0 years less	2.00 V @ 0.40 ms	608 ohms	No
LV4 to LV2	1.8 years less	2.50 V @ 0.40 ms	589 ohms	No
LV4 to LV3	1.8 years less	2.50 V @ 0.40 ms	551 ohms	No

COMPIA MRI INCLUDES

- Full Body MRI (1.5T and 3T)
- PhysioCurve™ Design
- CardioSync™ Optimisation
- VectorExpress™ LV Automated Test
- SmartShock™ Technology
- OptiVol™ 2.0 Fluid Status Monitoring
- MVP™ Mode with Complete Capture Management™ Diagnostic (ACM, RVCM, LVCM)

References

- ¹ Medtronic data on file 2015: Data from MarketScan® 2012 Commercial and Medicare Database, Truven Health Analytics.
- ² Karamitsos TD, Francis JM, Myerson S, Selvanayagam JB, Neubauer S. The role of cardiovascular magnetic resonance imaging in heart failure. *J Am Coll Cardiol*. October 6, 2009;54(15):1407-1424.
- ³ Yarnykh VL, Terashima M, Hayes CE, et al. Multicontrast black-blood MRI of carotid arteries: comparison between 1.5 and 3 tesla magnetic field strengths. *J Magn Reson Imaging*. May 2006;23(5):691-698.
- ⁴ <http://www.biomedsearch.com/article/Cardiovascular-MRI-at-3T/209239236.html>
- ⁵ <http://www.medscape.com/viewarticle/566817>.

Brief Statement

See the MRI SureScan™ Technical Manual before performing an MRI Scan and Device Manual for detailed information regarding the implant procedure, indications, contraindications, warnings, precautions, and potential complications/adverse events.



www.medtronic.com/manuals

Consult instructions for use on this website. Manuals can be viewed using a current version of any major Internet browser. For best results, use Adobe Acrobat® Reader with the browser.

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