THE FUTURE IS HERE

Meet Percepta™ Quad CRT-P MRI SureScan™
UNMATCHED FEATURE SUITE

- Enhanced longevity while maintaining exclusive PhysioCurve™ size and shape*
- Exclusive algorithms to optimize CRT response and patient outcomes
- Exclusive algorithms to manage atrial fibrillation (AF)

REIMAGINED CONNECTIVITY

BlueSync™ technology that enables tablet-based programming and app-based remote monitoring

STREAMLINED HEART FAILURE MANAGEMENT

Manage alerts of clinically relevant events with additional CareAlert™ notifications

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Meet Percepta™ Quad CRT-P MRI SureScan™

*Enhanced with additional features, including BlueSync™ technology and MRI SureScan™ technology, when compared to Viva CRT-P.*
UNMATCHED FEATURE SUITE

Enhanced Longevity

Percepta™ Quad CRT-P MRI SureScan™ estimated longevity is greater than Viva CRT-P.††

†Projected service life estimates assume device configuration at 50% AP, 50% RVP, 100% LVP, 2.5 V in both A and RV, 3.0 V in LV, 500 Ω lead impedances for all 3 chambers, Pre-storage EGM OFF. Projected service life estimates are based on accelerated battery discharge data and device modeling. The values calculated based on this information should not be interpreted as precise numbers. Individual patient results may vary based on their specific programming and experience.

††Projected service life estimates assume device configuration at 50% AP, 50% RVP, 100% LVP, 2.5 V in A, RV and LV, 500 Ω lead impedances for all 3 chambers, Pre-arrhythmia EGM storage programmed to On for the device lifetime. Projected service life estimates are based on accelerated battery discharge data and device modeling. The values calculated based on this information should not be interpreted as precise numbers. Individual patient results may vary based on their specific programming and experience.

**Estimated with AdaptivCRT™ programmed to BIV and LV.

PhysioCurve Design for Patient Comfort

- Tapered at the head and bottom of device to reduce skin pressure and promote patient comfort
- Designed with lead wrap in mind — landing area to minimize additional stresses on the lead†
UNMATCHED FEATURE SUITE

Exclusive Algorithms to Optimize CRT Delivery

AdaptivCRT™ Algorithm adapts to patients’ changing needs by optimizing CRT pacing minute-to-minute.

**IMPROVEMENT IN CRT RESPONSE**

**12%**
 Improvement in CRT patient response with AdaptivCRT*

**REDUCTION IN HOSPITALIZATIONS**

**59%**
 Reduction in a patient’s odds of 30-day HF readmission with AdaptivCRT*

**RELATIVE REDUCTION IN MORTALITY**

**29%**
 AdaptivCRT is associated with a 29% relative reduction in mortality†

*Comparing AdaptivCRT to Echo-optimized BiV pacing in patients with normal AV conduction, percentage of patients improved in Packer clinical composite score (CCS) at 6-month follow-up. CCS is a composite measure of mortality, HF hospitalizations, and symptomatic changes.

† Patients who received AdaptivCRT were associated with a 29% relative reduction in all-cause mortality vs. conventional CRT (after adjusting for other potential risk factors including age, gender, LVEF, NYHA class, QRS duration, AF, CAD, hypertension, AV block, and LBBB).
**Exclusive Algorithms to Manage AF**

**REDUCE**

**46%** reduction in AF risk with AdaptivCRT Algorithm**8**

*Most of the reduction in AF occurred in subgroups with prolonged AV conduction at baseline and with significant left atrial reverse remodeling.*

**36%** relative reduction in AT/AF episodes ≥ 7 days with Reactive ATP™ Algorithm**19**

*Compared to matched control group.*
BlueSync Technology

The implanted CRT-P uses BlueSync technology to communicate with the CareLink SmartSync™ Device Manager, MyCareLink Heart™ mobile app, and the MyCareLink Relay™ Home Communicator, reimagining the experience from implant through long-term patient management.
Security Measures$^{2,3}$

**BlueSync Technology**

BlueSync technology security was designed to protect the device, patient data, and connectivity.

### Device Protection

- **BlueSync devices do not accept programming from unauthorized sources.**

- **BlueSync devices are not connected to internet.** Devices do not have an IP address, unlike other connected consumer products.

### Data Privacy

**End-to-end encryption**

Data are encrypted in BlueSync technology using NIST* government standard for security before being transmitted to the CareLink network.

Please go to [medtronic.com/security](medtronic.com/security) for up-to-date security information.

*NIST: National Institute of Standards and Technology.*
MyCareLink Heart Mobile App

Patients can now use their smartphone to automatically transfer device data via the MyCareLink Heart mobile app, even outside the home (where cellular or Wi-Fi connectivity is available).*

*Please visit MCLHeart.com for a list of compatible smartphones and tablets.

Available on iOS and Android™.

My Heart Device
Displays battery longevity, implant date, heart device name, serial number, and patient’s clinic information.

Physical Activity
The app uses data from patient’s heart device to create daily, weekly, and monthly views of physical activity.

My Transmissions
Has information about transmissions sent from a patient’s heart device to their clinic.

Connectivity Status
Green check mark confirms Bluetooth® is ON and the app was connected recently.

Education
Provides information about living with a heart device.

Patients are required to keep their smartphone/tablet up to date to use the app.
Alternative Monitoring Option
MyCareLink Relay Home Communicator

A Bluetooth home communicator offers your patients an alternative option for easy and reliable monitoring.

- No manual pairing required
- Requires little to no user interaction

For patients who prefer not to use a smartphone.

MyCareLink Relay must be plugged in and patients must be within communication range for successful transmissions. Requires Wi-Fi or cellular connection.
Time to a clinical decision was \(~7x\) faster with the use of Medtronic CareAlert notifications compared to standard office follow-up.\(^{10}\)

**Clinical Management Alerts:**
- AT/AF Daily Burden Enable
- Avg. V. Rate during AT/AF
- Monitored VT Episode
- Ventricular Pacing < 90%

**Device Management Alerts:**
- Low Battery Voltage RRT
- A. Pacing Enable
- RV Pacing Enable
- LV Pacing Enable
- A. Capture Enable
- RV Capture Enable
- LV Capture Enable

**Built for MRI**

*With Percepta, patients have access to 1.5T and 3T full body scanning*\(^2,3\)

- Our SureScan devices and leads work in any combination.*
- Scanning conditions are simple: no MRI exclusion zone, no patient height restriction, no MRI duration restriction.

*For SureScan™ devices when MR conditions for use are met. For a complete list of approved device and lead combinations, please visit mrisurescan.com.*
References

1. Medtronic Viva™ CRT-P Model C6TR01 device manual.
2. Medtronic Percepta™ CRT-P MRI SureScan™ Model W1TR01 device manual.
3. Medtronic Percepta™ Quad CRT-P MRI SureScan™ Model W4TR01 device manual.
The patient connector is intended to be used with Medtronic apps to interrogate, analyze, and/or program implantable Medtronic devices. The patient connector uses Bluetooth technology to transmit that data to a Medtronic app for further processing. The patient connector is intended to be used by healthcare personnel only in a clinical or hospital environment.

Precautions: Security — Maintain adequate physical security of the patient connector to prevent unauthorized use that could lead to harm to patients. Bluetooth communication in the patient connector is encrypted for security. Medtronic inductive telemetry uses short-range communication to protect patient information. If the patient connector should fail, there is no risk of patient harm.

See the CareLink SmartSync 24967 Patient Connector Technical Manual before using the CareLink SmartSync device manager for detailed information regarding the procedure, indications, or intended uses, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at medtronic.com.

Potential Adverse Events: Potential complications include, but are not limited to, rejection phenomena, erosion through the skin, muscle or nerve stimulation, oversensing, failure to detect and/or terminate arrhythmias episodes, and surgical complications such as hematoma, infection, inflammation, and thrombosis. Other potential complications related to the lead may include lead dislodgement, lead conductor fracture, insulation failure, threshold elevation, or exit block. Potential MRI complications for the SureScan system include, but are not limited to, lead electrode heating and tissue damage resulting in loss of sensing or capture or both, or induced currents on leads resulting in continuous capture, VT/VF, and/or hemodynamic collapse; spontaneous tachyarrhythmia occurring during the scan that is not detected and treated because tachyarrhythmia detection is suspended while MRI SureScan is programmed to On; potential for VT/VF induction when the patient is programmed to an asynchronous pacing mode during MRI SureScan; device heating resulting in tissue damage in the implant pocket or patient discomfort or both; or damage to the functionality or mechanical integrity of the device resulting in the inability of the device to communicate with the programmer.

See the appropriate Percepta/Serena/Solara product Device Manuals for detailed information regarding the implant procedure, indications, contraindications, warnings, precautions, and potential complications/adverse events. See the appropriate Percepta/Serena/Solara product MRI SureScan Technical Manual before performing an MRI scan. For further information, call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at www.medtronic.com or www.mrisurescan.com.

Caution: Federal law (USA) restricts these devices to sale by or on the order of a physician.

Medtronic Model 24970A CareLink SmartSync™ Device Manager Base and Associated Apps

Indications: The base is intended to be used as part of the CareLink SmartSync device manager system. Clinicians use the base to analyze the electrical performance of cardiac leads during device implant or invasive troubleshooting. Clinicians use the base’s ECG connections along with the app display to view, measure, and record live cardiac waveforms. The base is intended to be used by healthcare professionals only in operating environments under direct medical supervision.

Contraindications: The base is not intended for use as an external pulse generator (EPG) outside of the implant procedure. In addition, the patient’s age and medical condition may dictate the lead analyses appropriate for the patient.

See the CareLink SmartSync 24970A and Technical Manual and 24967 Patient Connector Technical Manual before using the CareLink SmartSync device manager for detailed information regarding the procedure, indications, or intended uses, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at medtronic.com.

Medtronic Model 24967 Patient Connector and Associated Apps

Indications: The patient connector is intended to be used with Medtronic apps to interrogate, analyze, and/or program implantable Medtronic devices. The patient connector uses Bluetooth technology to transmit that data to a Medtronic app for further processing. The patient connector is intended to be used by healthcare personnel only in a clinical or hospital environment.

Precautions: Security — Maintain adequate physical security of the patient connector to prevent unauthorized use that could lead to harm to patients. Bluetooth communication in the patient connector is encrypted for security. Medtronic inductive telemetry uses short-range communication to protect patient information. If the patient connector should fail, there is no risk of patient harm.

See the CareLink SmartSync 24967 Patient Connector Technical Manual before using the CareLink SmartSync device manager for detailed information regarding the procedure, indications, or intended uses, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at medtronic.com.

Potential adverse events of ventricular or atrial pacing for patients with atrioventricular block (AV block), complete heart block, or sick sinus syndrome are contraindicated for concomitant implant with another bradycardia device or concomitant implant with an implantable cardioverter defibrillator. There are no known contraindications for the use of pacing as a therapeutic modality to control heart rate, the effect of the particular pacing system, mode of operation, and implant procedure used by the physician. Rate-responsive modes may be contraindicated in those patients who cannot tolerate pacing rates above the programmed Lower Rate. Dual chamber sequential pacing is contraindicated in patients with chronic or persistent supraventricular tachycardias, including atrial fibrillation or flutter. Asynchronous pacing is contraindicated in the presence (or likelihood) of competition between paced and intrinsic rhythms. Single chamber atrial pacing is contraindicated in patients with an AV conduction disturbance. Anti-tachycardia pacing (ATP) therapy is contraindicated in patients with an accessory antegrade pathway.

Warnings and Precautions: A complete SureScan pacing system is required for use in the MRI environment. Before performing an MRI scan, refer to the MRI technical manual for MRI-specific warnings and precautions. A complete SureScan pacing system includes a SureScan device with Medtronic SureScan leads or a Model 6725 pin plug for the right atrial port. Any other combination may result in a hazard to the patient during an MRI scan. Changes in a patient’s disease and/or medications may alter the efficacy of the device’s programmed parameters. Patients should avoid sources of magnetic and electromagnetic radiation to avoid possible underdetection, inappropriate sensing and/or therapy delivery, tissue damage, induction of an arrhythmia, device electrical reset, or device damage. Do not place transthoracic defibrillation paddles directly over the device. Certain programming and device operations may not provide cardiac resynchronization. Effective Replacement Indicator (ERI) results in the device switching to VVI pacing at 65 ppm. In this mode, patients may experience loss of cardiac resynchronization therapy and/or loss of sinus rhythm. For this reason, the device should be replaced prior to ERI being set. Use of the device should not change the application of established anti-arrhythmia protocols. Patients and their implanted systems must be screened to meet the following requirements for MRI: no implanted lead extenders, lead adaptors, or abandoned leads; no broken leads or leads with intermittent electrical contact as confirmed by lead impedance history; a SureScan pacing system implanted in the left or right pectoral region. Additionally, for patients whose device will be programmed to an asynchronous pacing mode when MRI SureScan is programmed to On, no diaphragmatic stimulation is present at a pacing output of 5.0 V and at a pulse width of 1.0 ms.

Medtronic Model 24970A CareLink SmartSync™ Device Manager Base and Associated Apps

Indications: The base is intended to be used as part of the CareLink SmartSync device manager system. Clinicians use the base to analyze the electrical performance of cardiac leads during device implant or invasive troubleshooting. Clinicians use the base’s ECG connections along with the app display to view, measure, and record live cardiac waveforms. The base is intended to be used by healthcare professionals only in operating environments under direct medical supervision.

Contraindications: The base is not intended for use as an external pulse generator (EPG) outside of the implant procedure. In addition, the patient’s age and medical condition may dictate the lead analyses appropriate for the patient.

See the CareLink SmartSync 24970A and Technical Manual and 24967 Patient Connector Technical Manual before using the CareLink SmartSync device manager for detailed information regarding the procedure, indications, or intended uses, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at medtronic.com.

Medtronic Model 24967 Patient Connector and Associated Apps

Indications: The patient connector is intended to be used with Medtronic apps to interrogate, analyze, and/or program implantable Medtronic devices. The patient connector uses Bluetooth technology to transmit that data to a Medtronic app for further processing. The patient connector is intended to be used by healthcare personnel only in a clinical or hospital environment.

Precautions: Security — Maintain adequate physical security of the patient connector to prevent unauthorized use that could lead to harm to patients. Bluetooth communication in the patient connector is encrypted for security. Medtronic inductive telemetry uses short-range communication to protect patient information. If the patient connector should fail, there is no risk of patient harm.

See the CareLink SmartSync 24967 Patient Connector Technical Manual before using the CareLink SmartSync device manager for detailed information regarding the procedure, indications, or intended uses, contraindications, warnings, precautions, and potential complications/adverse events. For further information, please call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at medtronic.com.

Potential complications for the SureScan system include, but are not limited to, rejection phenomena, erosion through the skin, muscle or nerve stimulation, oversensing, failure to detect and/or terminate arrhythmia episodes, and surgical complications such as hematoma, infection, inflammation, and thrombosis. Other potential complications related to the lead may include lead dislodgement, lead conductor fracture, insulation failure, threshold elevation, or exit block. Potential MRI complications for the SureScan system include, but are not limited to, lead electrode heating and tissue damage resulting in loss of sensing or capture or both, or induced currents on leads resulting in continuous capture, VT/VF, and/or hemodynamic collapse; spontaneous tachyarrhythmia occurring during the scan that is not detected and treated because tachyarrhythmia detection is suspended while MRI SureScan is programmed to On; potential for VT/VF induction when the patient is programmed to an asynchronous pacing mode during MRI SureScan; device heating resulting in tissue damage in the implant pocket or patient discomfort or both; or damage to the functionality or mechanical integrity of the device resulting in the inability of the device to communicate with the programmer.

See the appropriate Percepta/Serena/Solara product Device Manuals for detailed information regarding the implant procedure, indications, contraindications, warnings, precautions, and potential complications/adverse events. See the appropriate Percepta/Serena/Solara product MRI SureScan Technical Manual before performing an MRI Scan. For further information, call Medtronic at 1-800-328-2518 and/or consult the Medtronic website at www.medtronic.com or www.mrisurescan.com.

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