ELECTROSURGERY THERAPY

CRHF Technical Services Standard Letter

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The guidance provided in this letter is for healthcare providers and Medtronic representatives and applies to the following Medtronic device models:

Model number, model name, description (Non-MRI Conditional devices)

D314DRG Protecta XT DR Dual Chamber ICD, DF-1
D314DRM Protecta XT DR Dual Chamber ICD, DF4
D314TRG Protecta XT CRT-D Cardiac Resynchronization Therapy Defibrillator, DF-1
D314TRM Protecta XT CRT-D Cardiac Resynchronization Therapy Defibrillator, DF4
D314VRG Protecta XT VR Single Chamber ICD, DF-1
D314VRM Protecta XT VR Single Chamber ICD, DF4
D334DRG Protecta DR Dual Chamber ICD, DF-1
D334DRM Protecta DR Dual Chamber ICD, DF4
D334TRG Protecta CRT-D Cardiac Resynchronization Therapy Defibrillator, DF-1
D334TRM Protecta CRT-D Cardiac Resynchronization Therapy Defibrillator, DF4
D334VRG Protecta VR Single Chamber ICD, DF-1
D334VRM Protecta VR Single Chamber ICD, DF4

How to contact U.S. CRHF Technical Services:
Pacemakers: (800) 505-4636, ICDs: (800) 723-4636, Instruments: (800) 638-1991.
Email: tshelp@medtronic.com

ELECTROSURGERY THERAPY
Continued

This Standard Letter addresses Electrosurgery therapy

Electrosurgery – Electrosurgery (including electrocautery, electrosurgical cautery, and Medtronic Advanced

Energy surgical incision technology, and hyfrecator) is a process in which an electric probe is used to control bleeding, to cut tissue, or to remove unwanted tissue. Electrosurgery used on cardiac device patients may result in, but is not limited to, oversensing, unintended tissue damage, tachyarrhythmias, device damage, or device malfunction. If electrosurgery cannot be avoided, consider the following precautions:

- Ensure that temporary pacing and defibrillation equipment is available.
- Use a bipolar electrosurgery system or Medtronic Advanced Energy surgical incision technology, if possible.

  If a unipolar electrosurgery system is used, position the return electrode patch so that the electrical current pathway does not pass through or within 15 cm (6 in) of the device and leads.
- Do not apply unipolar electrosurgery within 15 cm (6 in) of the device and leads.
- Use short, intermittent, and irregular bursts at the lowest clinically appropriate energy levels.
- Always monitor the patient during electrosurgery. If the ECG tracing is not clear due to interference, manually monitor the patient's rhythm (take pulse); alternatively, monitor by some other means such as ear or finger pulse oximetry, Doppler pulse detection, or arterial pressure display.

To avoid or mitigate the effects of oversensing, consider the following precautions:

- Suspend tachyarrhythmia detection by using a magnet or a programmer. If a programmer is used and electrosurgery causes a device reset, the cardiac device resumes detection. After completing electrosurgery, remove the magnet or restore device parameters.
- If appropriate for the patient, program the device to an asynchronous pacing mode (for example, DOO). After completing electrosurgery, restore device parameters.

LABELING

Clinicians Manuals: Online manuals may be found at **www.medtronic.com/manuals.**

PROTECTA® VR D334VRM contrib_120848 M936852A001 D
PROTECTA® VR D334VRG contrib_171360 M952368A001 C
PROTECTA® CRT-D D334TRM contrib_171350 M950683A001C
PROTECTA® CRT-D D334TRG contrib_171349 M950682A001C
PROTECTA® DR D334DRM contrib_171352 M950685A001 C
PROTECTA® DR D334DRG contrib_171351 M950684A001 C
PROTECTA® XT VR D314VRM contrib_120847 M930567A001 C
PROTECTA® XT VR D314VRG wcm_prod064185 M930568A001 D
PROTECTA® XT CRT-D D314TRM contrib_171354 M950687A001C
PROTECTA® XT CRT-D D314TRG contrib_171353 M950686A001C
PROTECTA® XT DR D314DRM contrib_171356 M950689A001 C
PROTECTA® XT DR D314DRG contrib_171355 M950688A001 C

PATIENT MANAGEMENT GUIDANCE

This document is useful to health care professionals who perform medical procedures on patients with Medtronic implanted cardiac device systems and who consult with the patients' cardiologists.

Additional comments

For further information please contact the following:

- **Technical questions:** Medtronic Technical Services can answer additional questions regarding these device operations.
- **Device labeling:** For additional device-specific guidance**,** consult the labeling associated with the device available on the Medtronic Manual Library website at www.medtronic.com/manuals.
- **Patient questions:** Patients who have questions can contact Medtronic Heart Rhythm Patient Services at 1-800-551-5544, Option 3, email at pshelp@medtronic.com, or see www.medtronic.com/rhythms for a variety of resources.