Using a Magnet to Inhibit Tachy Therapy in Boston Scientific ICDs and CRT-Ds

A magnet may be used with all Boston Scientific ICDs and CRT-Ds to temporarily inhibit tachytherapy, assuming the device has been previously programmed to respond to magnet application.

IMPORTANT: A small subset of Boston Scientific devices* includes an additional magnet function which can be used to toggle Tachycardia Therapy between 'Off' and 'Monitor + Therapy'. If the device is in this subset or the model is unknown, contact Technical Services for additional magnet use information prior to magnet application.

*PRIZM: 1850, 1851, 1852, 1853, 1855, 1856, 1857, and 1858;
PRIZM 2: 1860, 1861; VITALITY DS T125, T135; VITALITY EL: T127

Determine if Magnet Functions are Enabled

To determine if the device has been programmed to respond to magnet application, position a doughnut magnet (Model 6860) over the device and listen for tones.

If tones ARE heard, magnet functions are enabled.

If tones ARE NOT heard:
- Magnet functions are not enabled (i.e., a programmer is required to program magnet functions On in order to use a magnet to inhibit therapy), or
- The magnet is not correctly positioned over the device, or
- The device was not manufactured by Boston Scientific.

Using a Magnet to Temporarily Inhibit Tachy Therapy

To inhibit tachytherapy, position a doughnut magnet (Model 6860) over the device. While the magnet is in place and tones are heard, the tachyarrhythmia detection process continues, but therapy will not be delivered as long as the magnet remains correctly positioned. Two to three seconds following magnet removal, the device will return to the programmed Tachy Therapy Mode and no tones will be heard.

NOTES:
- If any tones continue more than three seconds after the magnet has been removed, contact Technical Services.
- If tones change (from beeping to continuous or vice versa) after 30 seconds of magnet application, this model is within the select group of Boston Scientific defibrillators in which a doughnut magnet may also be used to toggle Tachycardia Therapy Mode between "Monitor + Therapy" and "Off" (discussed in the box above).

To program Tachy mode back to "Monitor + Therapy":
- Remove the magnet for at least 2 seconds.
- Reapply until the tones change to beeping (approximately 30 seconds).
- Remove the magnet.

Contact Technical services for further information about this feature.
Figure 1. Using a Magnet to Temporarily Inhibit Tachy Therapy (available in all Boston Scientific ICDs and CRT-Ds)

NOTES:
- Contact your local representative or Technical Services with questions regarding magnet use.
- If the device is programmed to Electrocautery Protection Mode or Off-Electrocautery, magnet application will have no impact on Tachy therapy delivery. Tones will be determined by device programming (i.e., electrocautery mode) rather than magnet application and may not match those described in this ACL.
- Device responses described are dependent upon available device features and programming.
- Unlike pacemakers, magnet application does not affect bradycardia pacing in an ICD or CRT-D.
- Advise patients to have their device checked whenever tones are heard.
- Boston Scientific issued a Product Advisory dated June 23, 2005, regarding important information for specific serialized devices within the following Models: H170/H173/H175/H177/ H179/H190/H195/ H197/H199/M155/M159/ M170/M175/M177/M179/H230/H235/H239. We recommended that physicians consider programming the Enable Magnet Use feature “OFF” in these devices. A programmer software upgrade has since been released, which identifies affected devices and warns clinicians when they attempt to enable magnet features in these devices. A serialized device lookup tool to determine if a device is affected by this product advisory is available at www.bostonscientific.com or www.bostonscientific-international.com.