AUTOGEN™ EL (Extended Longevity) ICD
Models D174, D175, D176 and D177

• Projected to last 11+ years for VR devices and 10+ years for DR devices under true usage conditions.
• This small (29.5 cc) and thin (9.9 mm) high-energy device is designed to enhance patient comfort.
• RightRate™ features BSC’s MV Sensor—the only sensor clinically proven to restore chronotropic competence.1
• The PaceSafe™ RV and RA auto threshold feature is designed to maintain adequate output safety margins.
• Offers an advanced system solution for patient comorbidities and HF monitoring (AP Scan, HF Perspectiv™ report, LATITUDE™ NXT Remote Patient Management with weight scale and blood pressure sensors, and Respiratory Rate Trend).
• Offers AcuShock™ Advanced Technology, multiple programmable options to reduce inappropriate and unnecessary shocks, including a choice of rhythm discriminators, RhythmID™ with RhythmMatch™ (customization of Rhythm ID algorithm), antitachycardia pacing (ATP) therapy in all rates zones, and advanced sensing and filtering.
• AV Search + and RYTHMIQ™ give clinicians options to appropriately manage RV pacing in patients with varying degrees of conduction block.
• Wireless ECG saves time and simplifies follow-up.
• EasyView™ header and color coded lead ports designed to make the implant experience more efficient.
• SafetyCore™ technology is intended to provide lifesaving shock therapy and basic pacing functionality in the event of an unrecoverable fault.

Mechanical Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Size (cm) (W x H x D)</th>
<th>Mass (g)</th>
<th>Volume (cc)</th>
<th>Connector Type (RA RV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D174</td>
<td>VR</td>
<td>5.37 x 7.36 x 0.99</td>
<td>68.9</td>
<td>29.5</td>
<td>RV:DF4</td>
</tr>
<tr>
<td>D176</td>
<td>DR</td>
<td>5.37 x 7.68 x 0.99</td>
<td>71.4</td>
<td>31.0</td>
<td>RA:IS-1/RV:DF4</td>
</tr>
<tr>
<td>D175</td>
<td>VR</td>
<td>5.37 x 7.79 x 0.99</td>
<td>70.7</td>
<td>31.5</td>
<td>RV:IS-1/DF–1</td>
</tr>
<tr>
<td>D177</td>
<td>DR</td>
<td>5.37 x 7.79 x 0.99</td>
<td>71.0</td>
<td>31.5</td>
<td>RA:IS-1/RV:IS-1/DF–1</td>
</tr>
</tbody>
</table>

Pulse Generator Longevity (All Models abcde)

<table>
<thead>
<tr>
<th>Longevity (years) at 500, 700, and 900 Pacing Impedance (RV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacing VR DR VR DR VR DR</td>
</tr>
<tr>
<td>500 700 900 500 700 900</td>
</tr>
<tr>
<td>0 % (without PaceSafe) 11.7 12.2 11.7 11.2 11.7 11.2</td>
</tr>
<tr>
<td>15 % (with PaceSafe)* 11.5 10.9 11.6 11.0 11.6 11.0</td>
</tr>
</tbody>
</table>

Additional Longevity Information

- For longevity calculations based on different settings please contact Boston Scientific technical services or your local representative.
- Boston Scientific devices have corporate warranties at 10 years (VR) and 8 years (DR) in available geographies.
- Devices use Li/MnO₂ chemistry.
- The Usable Battery Capacity is 1.9 Amp-hours for the EL ICD (typical implant to battery capacity depleted).
- Shelf life is 2 years (before use by).

# AUTOGEN™ EL (Extended Longevity) ICD

## Models D174, D175, D176 and D177

### Pacing Therapy

#### Brady Modes
- Normal: DDD(R), DDI(R), VDD(R), VVI(R), AAI(R), Off
- Temporary: DDD, DDI, DOO, VDD, VVI, VOO, AAI, AOO, Off

#### AT/AF Management
- ATR Mode Switch, Ventricular Rate Regulation (VRR), Atrial Flutter Response (AFR), PMT Termination, Rate Smoothing

#### Automaticity
- PaceSafe™ Right Atrial Automatic Threshold (RAAT), PaceSafe Right Ventricular Automatic Threshold (RVAT)

#### Rate Adaptive Pacing
- Accelerometer, RightRate™ (Minute Ventilation) or blended sensors with sensor trending function.

#### RV Pacing Reduction
- AV Search+, RYTHMIQ™, AV Delays to 400 ms, Rate Hysteresis

### Patient Diagnostics

#### Arrhythmia Logbook
- Events summary, Stored Electrograms with Annotated Markers, Intervals and approximately 17 minutes of multi-channel EGM, always with 10 seconds Onset and event storage prioritization. Implant activation of all available EGMs. On screen measurement of all stored signal amplitudes and timings.

#### Histograms & Counters
- Tachy Events and Brady Counters

#### Heart Rate Variability (HRV)
- SDANN and HRV Footprint (24 hour heart rate collection period)

#### Daily Trends For Last 365 Days
- Events, Activity Level, Atrial Burden, Respiratory Rate, AP Scan, Heart Rate, SDANN, HRV Footprint, Automatic Balance Monitor (ABM), Lead impedances and amplitudes, RA Pace Threshold, RV Pace Threshold.

#### AT/AF Diagnostics
- % Atrial Burden, Daily burden, Average V-rate during ATR Mode Switch Episode

#### Heart Failure Therapy/ Diagnostics

### Device Testing / Induction Methods

#### Induction Methods
- Vfib Induction, Shock on T Induction, Programmed Electrical Stimulation (PES), 50 Hz/Manual Burst Pacing

#### Commanded Therapy Methods
- Commanded Shock, Commanded ATP

### Tachyarrhythmia Therapy

#### Sensing/Detection
- Zones VF only, or VF and VT or VF, VT, VT-1. Lowest Zone can be Monitor Only.

#### Shock Reduction and Appropriate Therapy
- AutoShock™ Advanced Technology including Onset/Stability™, Rhythm ID™ with RhythmMatch™, Dynamic Noise Algorithm (DNA) for sensing, Automatic Gain Control (AGC) with programmable sensing floor, Narrow Band Pass Filter

#### Antitachycardia Therapy
- Quick Convert™ in VF Zone. Two programmable ATP schemes in both VT and VT-1 zones. Quick Convert greater than 250 min⁻¹ available, Burst, Ramp, Scan, Ramp-Scan.

#### Shock Energy
- 41 J stored, 35 J delivered. First two shocks in each zone programmable. VT-1 has 5 shocks, VT has 6 shocks and VF has 8 shocks. Reverse Last Shock Polarity in zone. Programmable RV Coil to RA Coil and Can (TRUAD), RV Coil to Can, RV Coil to RA Coil (COLD CAN)

#### Nominals
- VF Zone (200 min⁻¹)–Detection: Rate and Duration, Therapy: Quick Convert, 8 high energy shocks
- VT Zone (160 min⁻¹)–Detection: RhythmID or Onset/ Stability, Therapy: ATP x 2, 6 high energy shocks

### Implant/In Clinic Follow Up

#### Implant Communication Mode
- Programmable values: Enable use of ZIP™ telemetry (MICS) (Requires initial use of wand for device ID) or use wand for all telemetry

#### Nominals
- VF Zone (200 min⁻¹)–Detection: Rate and Duration, Therapy: Quick Convert, 8 high energy shocks
- VT Zone (160 min⁻¹)–Detection: RhythmID or Onset/ Stability, Therapy: ATP x 2, 6 high energy shocks

#### In Clinic Follow-Up
- Wireless ECG

### Remote Follow Up

#### Patient Triggered Monitor (PTM)
- Triggers the storage of two minutes onset and one minute post-EGMs, intervals; and annotated marker data during a symptomatic episode by placing a magnet over the device

#### Bepper Feature (Patient Alerts)
- Beep During Capacitor Charge, Beep when Explant is Indicated, Beep when Lead Impedance measurement (Shock or Pace) is Out-of-Range

#### Magnet Feature
- Magnet Response (Off, Store EGM, Inhibit Therapy)

### Remote Monitoring
- This device is designed to be LATITUDE™ NXT enabled; LATITUDE NXT availability varies by region

### Thresholds
- Automatic storage of last successful daily PaceSafe threshold test for all active chambers

### Wireless
- Remote follow-up for all devices (MICS)

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