

## DYNAGEN™ EL (Extended Longevity) ICD

Models D150, D151, D152 and D153

- 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.
- 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

| Model | Type | Size (cm)<br>(W x H x D) | Mass (g) | Volume (cc) | Connector Type<br>(RA RV) |
|-------|------|--------------------------|----------|-------------|---------------------------|
| D150  | VR   | 5.37 x 7.36 x 0.99       | 68.9     | 29.5        | RV:DF4                    |
| D152  | DR   | 5.37 x 7.68 x 0.99       | 71.4     | 31.0        | RA:IS-1;RV:DF4            |
| D151  | VR   | 5.37 x 7.79 x 0.99       | 70.7     | 31.5        | RV:IS-1/DF-1              |
| D153  | DR   | 5.37 x 7.79 x 0.99       | 71.0     | 31.5        | RA:IS-1;RV:IS-1/DF-1      |

### Pulse Generator Longevity (All Models <sup>a,b,c,d</sup>)

#### Longevity (years) at 500Ω, 700Ω, and 900Ω Pacing Impedance (RV)

| Pacing | 500Ω |      | 700Ω |      | 900Ω |      |
|--------|------|------|------|------|------|------|
|        | VR   | DR   | VR   | DR   | VR   | DR   |
| 0 %    | 11.7 | 11.2 | 11.7 | 11.2 | 11.7 | 11.2 |
| 15 %   | 11.5 | 10.8 | 11.5 | 10.9 | 11.6 | 10.9 |

a Assumes ZIP™ telemetry use for 1 hour at implant time and for 40 minutes annually for in-clinic follow-up checks.

b Assumes standard use of the LATITUDE™ Communicator as follows: Daily Device Check on, monthly Full Interrogations (scheduled remote follow ups, and quarterly patient-interrogations).

c Assumes 60 min<sup>-1</sup> LRL, ventricular and atrial settings of 2.5 V pacing pulse Amplitude and 0.4 ms pacing pulse width; RA Impedance 500 Ω; sensors On.

d Projected longevity is calculated assuming 3 maximum energy charging cycles per year, including automatic capacitor re-forms and therapeutic shocks. For the final year of device service, an additional 5 charging cycles are assumed to account for additional automatic capacitor re-forms as the device approaches the Explant indicator. These calculations also assume 3-channel EGM Onset is set to On, and that the pulse generator spends 6 months in Storage mode during shipping and storage.

### 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/MnO<sub>2</sub> 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).

**Longevity projections as provided in the product labeling. Specific programmable parameter ranges available in product labeling. Product labeling available at [www.BostonScientific-International.com/manuals](http://www.BostonScientific-International.com/manuals). Warranty information available at [www.bostonscientific.com/warranty](http://www.bostonscientific.com/warranty).**

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## Pacing Therapy

|                             |  |
|-----------------------------|--|
| <b>Brady Modes</b>          | Normal: DDD(R), DDI(R), VDD(R), VVI(R), AAI(R), Off<br>Temporary: DDD, DDI, DOO, VDD, VVI, VOO, AAI, AOO, Off      |
| <b>AT/AF Management</b>     | ATR Mode Switch, Ventricular Rate Regulation (VRR), Atrial Flutter Response (AFR), PMT Termination, Rate Smoothing |
| <b>Rate Adaptive Pacing</b> | Accelerometer with sensor trending function  |
| <b>RV Pacing Reduction</b>  | AV Search+, RYTHMIQ™, AV Delays to 400 ms, Rate Hysteresis   |

## Patient Diagnostics

|   |  |
|---|--|
| <b>Arrhythmia Logbook</b>                 | 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 timing             |
| <b>Histograms &amp; Counters</b>          | Tachy Events and Brady Counters  |
| <b>Heart Rate Variability (HRV)</b>       | SDANN and HRV Footprint (24 hour heart rate collection period)   |
| <b>Daily Trends For Last 365 Days</b>     | Events, Activity Level, Atrial Burden, Respiratory Rate, AP Scan, Heart Rate, SDANN, HRV Footprint, Autonomic Balance Monitor (ABM), Lead impedances and amplitudes<br><i>To note: Automatic activation of all available daily trends at implant.</i>  |
| <b>AT/AF Diagnostics</b>                  | % Atrial Burden, Daily burden, Average V-rate during ATR Mode Switch Episode   |
| <b>Heart Failure Therapy/ Diagnostics</b> | HF Perspectiv™ report, Respiratory Rate Trend, AP Scan, Weight, Blood Pressure, Heart Rates, HRV Footprint, SDANN, Autonomic Balance Monitor (ABM), Atrial Arrhythmia Burden, Activity Level, A & V Arrhythmias, Pacing Histograms<br><i>To note: Weight and Blood Pressure are only available via LATITUDE.</i> |

## Device Testing/Induction Methods

|                                  |  |
|----------------------------------|--|
| <b>Induction Methods</b>         | Vfib Induction, Shock on T Induction, Programmed Electrical Stimulation (PES), 50 Hz/Manual Burst Pacing |
| <b>Commanded Therapy Methods</b> | Commanded Shock, Commanded ATP   |

## Tachyarrhythmia Therapy

|   |  |
|---|--|
| <b>Sensing/Detection</b>                                | Zones VF only, or VF and VT or VF, VT, VT-1. Lowest Zone can be Monitor Only   |
| <b>Shock Reduction and Appropriate Therapy</b>          | AcuShock™ Advanced Technology including Onset/Stability™, RhythmID™ with RhythmMatch™, Dynamic Noise Algorithm (DNA) for sensing, Automatic Gain Control (AGC) with programmable sensing floor, Narrow Band Pass Filter  |
| <b>Antitachycardia Pacing Therapy (ATP) Termination</b> | Quick Convert™ in VF Zone. Two programmable ATP schemes in both VT and VT-1 zones. Quick Convert greater than 250 min <sup>-1</sup> available, Burst, Ramp, Scan, Ramp-Scan  |
| <b>Shock Energy</b>                                     | 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 (TRIAD), RV Coil to Can, RV Coil to RA Coil (COLD CAN) |
| <b>Nominals</b>   | VF Zone (200 min <sup>-1</sup> )—Detection: Rate and Duration, Therapy: Quick Convert, 8 high energy shocks<br>VT Zone (160 min <sup>-1</sup> )—Detection: RhythmID or OBDE, Therapy: ATP x 2, 6 high energy shocks  |

## Implant/In Clinic Follow Up

|                                   |  |
|-----------------------------------|--|
| <b>Implant Communication Mode</b> | Programmable values: Enable use of ZIP™ telemetry (MICS) (Requires initial use of wand for device ID) or use wand for all telemetry<br>Nominal: Enable use of ZIP telemetry (Requires initial use of wand for device ID) |
| <b>In clinic Follow-Up</b>        | Wireless ECG   |

## Remote Follow Up

|  |   |
|--|---|
| <b>Patient Triggered Monitor (PTM)</b> | 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 |
| <b>Beeper Feature (Patient Alerts)</b> | Beep During Capacitor Charge, Beep when Explant is Indicated, Beep when Lead Impedance measurement (Shock or Pace) is Out-of-Range  |
| <b>Magnet Feature</b>                  | Magnet Response (Off, Store EGM, Inhibit Therapy)   |
| <b>Remote Monitoring</b>               | This device is designed to be LATITUDE™ NXT enabled; LATITUDE NXT availability varies by region   |
| <b>Wireless</b>                        | Remote follow-up for all devices (MICS)   |

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