**System Technology**

**IMPLANTED SYSTEM COMPONENTS**

**CO-IMPLANT DEVICE**
Co-implanted pacemaker, ICD or CRT paces the right ventricle.

**RECEIVER ELECTRODE**
Implanted onto the endocardium, the receiver electrode converts ultrasound energy into electrical energy to pace the left ventricle.

**BATTERY**
Implanted subcutaneously on the left mid axillary line, powers the transmitter.

**TRANSMITTER**
Phased array ultrasound transmitter is implanted sub-muscular over a cardiac echo window. Synchronizes with an RV pacing pulse to transmit ultrasound energy to the receiver electrode to provide Bi-V endocardial pacing.

**RECEIVER ELECTRODE**

**Small Size**
Expected to diminish the need for chronic anticoagulation

**Secure Attachment**
Endothelializes for a low risk of thromboembolic events

- Anchors onto endocardial wall with 5 nitinol tines
- Passive device with no need for replacement
- Full endothelialization in animal testing at 30 to 45 days*


**LEN**: 9.1mm
**DIAM**: 2.7mm
**WEIGHT**: 0.12 grams
**VOLUME**: 0.05 cc

*Image taken from in-vivo study (caprine) at 45 days post implant*
WiSE CRT IMPLANTATION PROCESS

Stage 0:
Pre-implant Assessment
- Performed by a cardiac sonographer in an outpatient setting using standard TTE
- Intercostal spaces are assessed for transmitter implantation to identify acoustic transmission paths that are free of lung and rib

Stage 1:
Transmitter and Battery Implantation
1. Make incisions above the identified Transmitter implantation site and on the mid-axillary line
2. Create pockets for the transmitter and the battery
3. Create a tunnel between pockets for the transmitter cable
4. Secure the transmitter to the intercostal muscle
5. Connect the transmitter cable to the battery and secure the battery in the subcutaneous pocket

Stage 2:
Receiver Electrode Implantation
1. Introduce the 12F Delivery System into the LV via a retrograde aortic approach
2. Navigate the Delivery System to a target site using fluoroscopy
3. Evaluate conventional pacing capture thresholds, local electrograms, and/or hemodynamics of pacing the site prior to anchoring the receiver electrode
4. Once a suitable site has been selected, anchor the receiver electrode into the LV wall, detach and release it from the Delivery System

Results from the SELECT-LV trial confirm all Receiver Electrode devices were safely placed without pericardial effusion events (N=34)