Demographics:

1. Study ID number
2. Age (yr)
3. Sex
4. Height (cm)
5. Weight (kg)
6. Primary vs secondary prevention device
7. Clinical Disease
   1. Channelopathy/Inherited arrhythmia syndrome
      1. LQTS 1, 2, 3, other
      2. CPVT
      3. Brugada Syndrome
   2. Structural heart disease
      1. Yes/No
      2. Single ventricle physiology (yes/no)
   3. Cardiomyopathy
      1. Hypertrophic
      2. Dilated
      3. Restrictive
      4. ARVC
      5. Myocarditis
      6. LV non-compaction
   4. Idiopathic Ventricular Fibrillation
8. Arrhythmia History
   1. Ventricular fibrillation
   2. Ventricular tachycardia
   3. Atrial arrhythmia
9. Comorbidities
   1. Congestive Heart Failure (NYHA I, II, III, IV)
   2. Concomitant pacemaker
   3. Previous transvenous ICD
10. Cardiac medications
    1. Beta blockers
    2. ACE/ARBs
    3. Diuretic
    4. Anti-platelet/anti-coagulation

Clinical parameters

1. EKG parameters at baseline (PR, QRSd, QT, QTc)
   1. De-identified EKG provided for investigator review
2. EKG parameters during eligibility screening (de-identified EKG provided for investigator review)
   1. R and T-wave amplitude (leads I, II, III), R:T ratio in each lead
   2. Right and left parasternal, supine, prone, right and left lateral position
   3. Exercise testing
3. Echocardiogram parameters
   1. Fractional shortening
   2. EF %
   3. Qualitative estimate (normal, mild, moderate, severe dysfunction)

Procedural parameters:

1. Procedural time (min, “skin to skin”)
2. Fluoroscopy time (min)
3. General anesthesia (yes/no)
4. Device generation (1st, 2nd)
5. Implantation technique
   1. Subcutaneous 3-incision, subcutaneous 2-incision
   2. Generator position: axillary, submuscular, subfascial
   3. Sternal lead position: right, left
6. Implant conversion testing (yes/no)
   1. Successful conversion (yes/no)
   2. Joules used for successful conversion
   3. Number of attempts required
   4. Intervention for failed conversion
      1. Repositioning of device
      2. Change in sensing vector
      3. Other
7. Device parameters (at implantation)
   1. Final sensing vector utilized (primary, secondary, alternate)
   2. Shock zone (bpm)
   3. Conditional zone (bpm)

Device Performance

1. Number of spontaneous episodes recorded
   1. Appropriate therapy delivered
      1. Time following implant (mo)
      2. Sustained VT/VF
         1. Discrete episode
         2. VT/VF storm (≥3 treated episodes within 24 hr)
      3. Number of shocks required
      4. Time to shock (min)
      5. VT/VF conversion prior to shock
   2. Untreated episodes
      1. Inappropriate sensing
      2. Non-sustained VT/VF
      3. Non-sustained SVT above discrimination zone
      4. Unclassified
   3. Inappropriate Shock
      1. Time following implant (mo)
      2. Reason for inappropriate shock
         1. SVT above discrimination zone
         2. Inappropriate sensing (cardiac)
         3. Inappropriate sensing (non-cardiac)
         4. VF/SVT discrimination error
      3. Number of shocks
      4. Programing at inappropriate shock
         1. Sensing vector (primary, secondary, alternate)
         2. Shock zone (bpm)
         3. Conditional zone (bpm)
      5. Response to inappropriate shock
         1. Reprogramming
            1. Increase in shock zone
            2. Addition of conditional zone
            3. Alternate vector chosen

Exercise testing guided (yes/no)

* + - 1. Medication change
      2. Repositioning of device
      3. Explant of device
    1. Subsequent inappropriate shock following response

1. Complications
   1. Minor (mitigation without the need for intervention) vs major (need for intervention)
   2. Acute (<30 days)
   3. Time post implantation (mo)
   4. Procedural
      1. Hematoma
      2. Pleural effusion
      3. Pneumothorax
      4. Incisional or superficial infection
      5. System infection
         1. Need for explant
         2. Concomitant procedure
      6. Generator site discomfort >30 days post implant
      7. Other
   5. S-ICD system
      1. Erosion of implanted lead
      2. Erosion of implanted generator
      3. Suboptimal lead position/electrode movement
      4. Suboptimal generator position
      5. Lead fracture/breakage
      6. Inappropriate shock
      7. Failure to convert spontaneous sustained VT/VF
      8. Inability to communicate with device
      9. Premature battery depletion
      10. Other
   6. Mortality
2. Follow-up duration (mo)
   1. MRI performed
3. Total number of SICD implants performed by implantor prior to this patient