MADIT CHAGAS PROPOSAL: Preliminary Draft 9/10/2013

1) Inclusion Criteria

    (1) Seropositivity for T. Cruzi by at least two methods (ELISA, indirect inmunofluorescence, indirect hemagglutination)

    (2) NYHA Class II and III

    (3) EF >30% and < 45% by echo and evidence of abnormal LV systolic dimension, wall motion abnormalities and/or apical aneurysm.

    (4) 12 lead ECG evidence of cardiac conduction involvement as defined by the following: RBBB, LAFB, and first degree AV Block (>200 msec).

2) Exclusion Criteria

    (1) History of Syncope in the last 6 months

    (2) No evidence of CAD

    (3) NYHA Class IV

    (4) Documented spontaneous sustained ventricular arrhythmias or history of Cardiac Arrest

    (5) Sinus Bradycardia or AV conduction disturbances requiring Pacemaker Implantation

    (6) Prior ICD or Pacer Implant

    (7) Other comorbidities likely to affect one year survival

    (8) Inability to be followed by device interrogations

Eligible patients will be randomized to one of two arms

- **ARM 1: CRT-D Implantation**
    - CRT-D (LV lead location guidelines to be discussed) AV interval to be guided by QRS morphology
    - Two Therapy Zones
        - 170 to 200 bpm
            - 60 sec delay for therapy initiation
            - ATP (minimum 3 bursts, starting at 84% CL) followed by Quick ATP and shock
        - >200bpm
            - 5 sec delay for therapy initiation
            - Quick ATP followed by shock
    - Best Practice management for use of ACE, beta blockers, anticoagulation and Amiodarone if needed

- **ARM 2: Medical Therapy**
    - Best Practice management for use of ACE, beta blockers, anticoagulation and Amiodarone if needed

300 Patients randomized 1:1 to each arm

- Mean Follow Up, 12 to 24 months
- Intention to treat analysis
- **Primary Endpoint**: Echocardiography evidence of reverse remodeling
- **Secondary Endpoint**: Composite of Death and Cardiac Related Hospitalization
- Hypothesis: LV remodeling expressed as 10% reduction in LVEDV and 15% reduction in LVESV (underpowered to show clinical effect but hopefully will show reduction in cardiac events which will lead to a larger ICD trial)