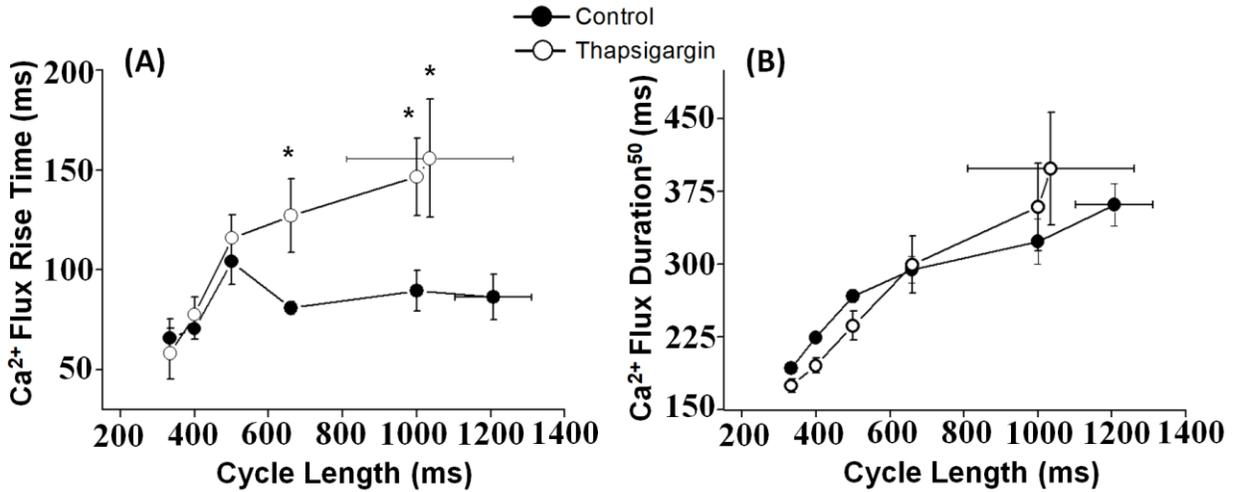


Supplemental Figure 5: Cycle Length and Calcium Flux Characteristics



Supplemental Figure 5. Fura4 fluorescent calcium indicator and thapsigargin, an irreversible SERCA2a inhibitor, were utilized on engineered cardiac grafts (n=5). Each engineered cardiac graft was assessed prior to exposure to thapsigargin so as to generate the control dataset.

(A) Calcium (Ca²⁺) flux rise time in milliseconds (ms) versus cycle length in ms. The control grafts exhibited relative consistency in Ca²⁺ rise time (black circles) while thapsigargin-treated grafts (white circles) had a statistically significant delay in rise time at higher cycle lengths. * two-tailed unpaired t test versus Control, p<0.05.

(B) Ca²⁺ flux duration to fifty percent in ms versus cycle length in ms. No statistically significant relationships were found between the control (black circles) and thapsigargin-treated grafts (white circles).