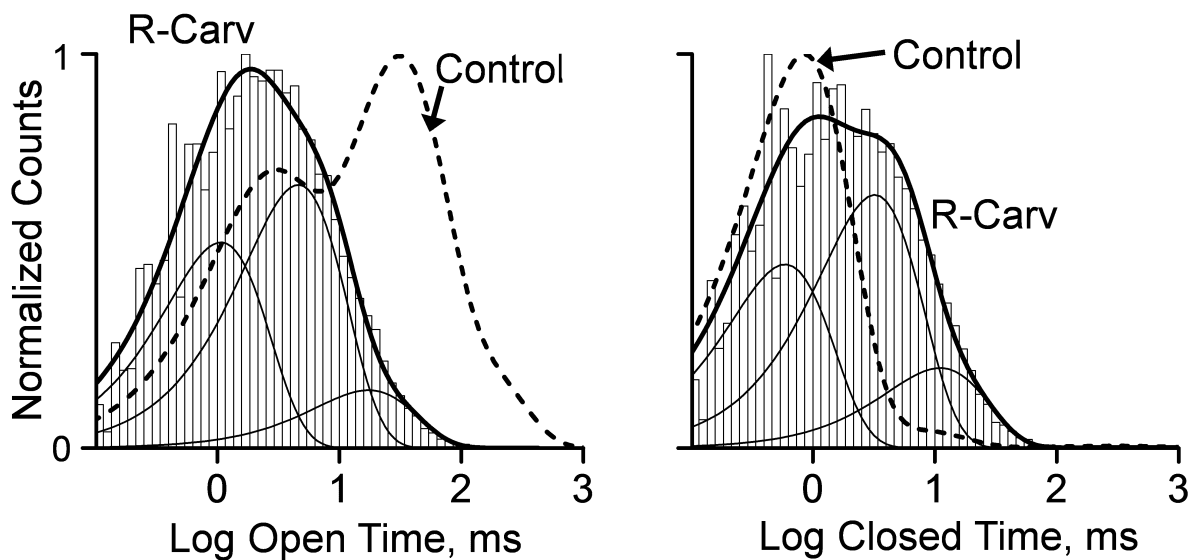


Supplementary Materials

Supplementary Figure 1



|         | To-1 ms (%) | To-2 ms (%) | To-3 ms (%) | Tc-1 ms (%) | Tc-2 ms (%) | To-3 ms (%) |
|---------|-------------|-------------|-------------|-------------|-------------|-------------|
| Control | 2.1 (31)    | 28.3 (55)   | 124.0 (14)  | 0.8 (95)    | 7.1 (4.5)   | 313.2 (0.5) |
| R-Carv  | 1.07 (39)   | 4.61 (50)   | 17.4 (11)   | 0.6 (36)    | 3.2 (49)    | 11.1 (15)   |

Supplementary Figure Legend

**Figure 1S.** Sample open (top left) and closed (top right) time histograms representing the gating of a control (dotted line) and *R*-carvedilol treated (solid lines) single RyR2 channels. Histograms were each generated from 4 minute single RyR2 recordings and were normalized to their peak value. For the *R*-carvedilol case, the thick line is the best-fit and the thin lines are its 3 individual components. The table (bottom) contains the best-fit open (To-1, To-2 & To-3) and closed (Tc-1, Tc-2 & Tc-3) time constants. The percent area of the histogram represented by each time constant is indicated in parentheses. In all cases, histograms were best fit by the sum of 3 exponential components.