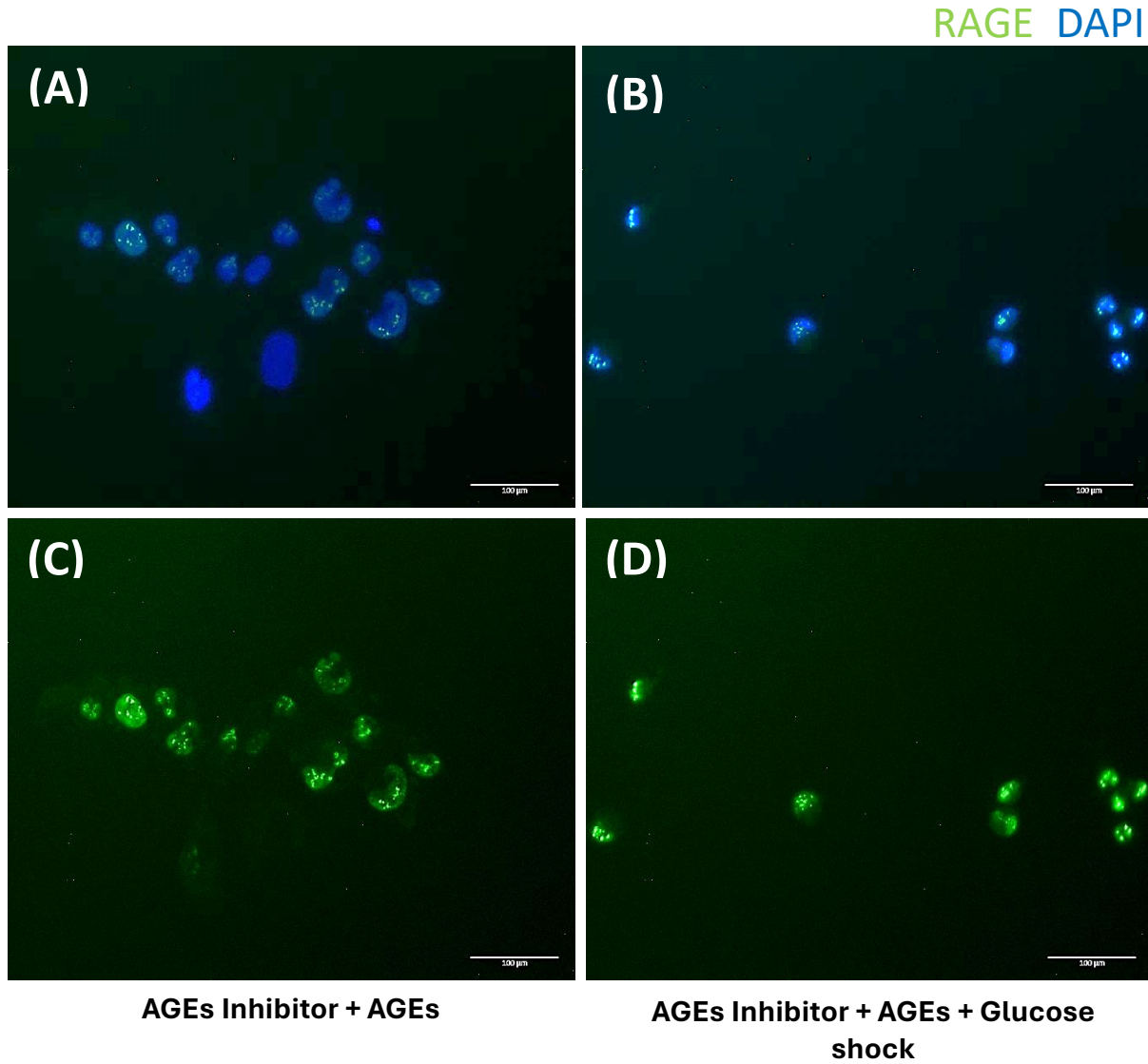
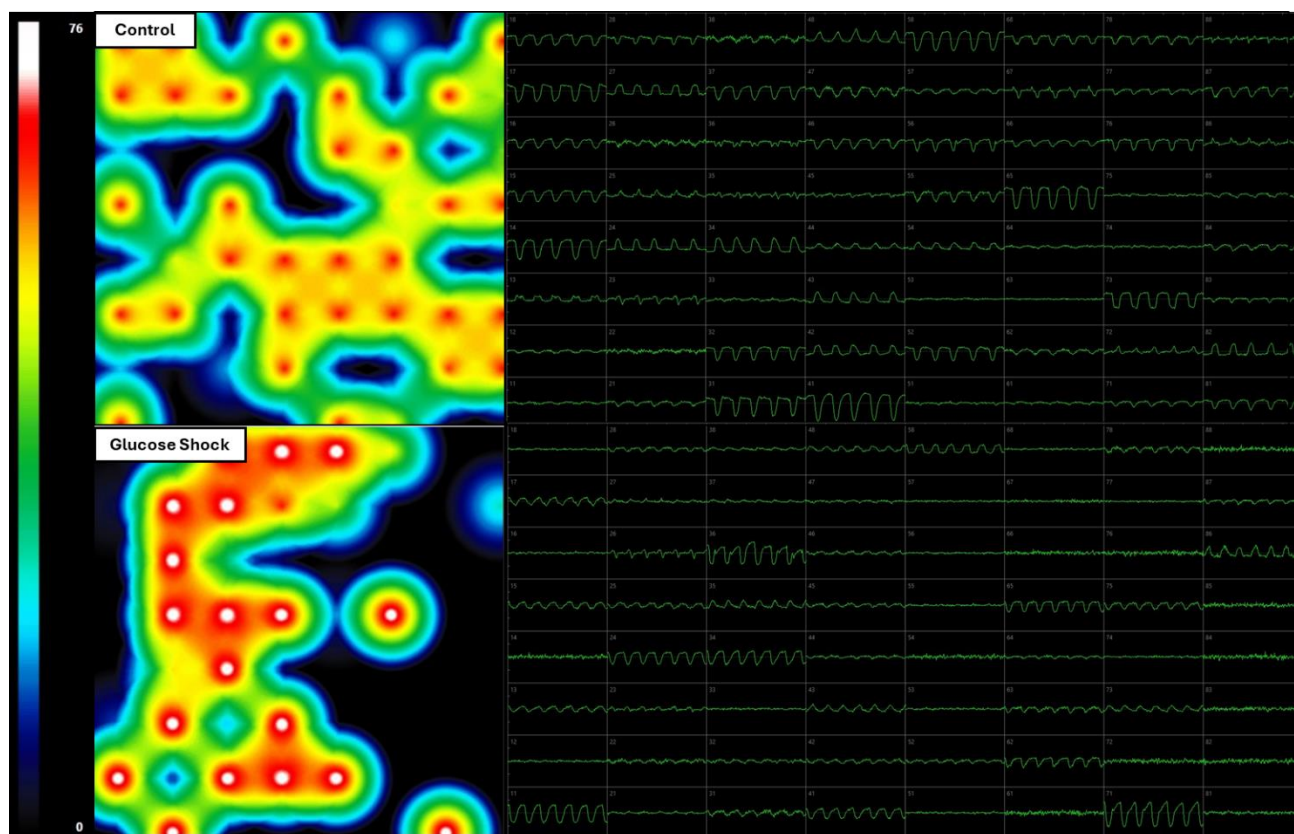


Supplementary Information (SI)

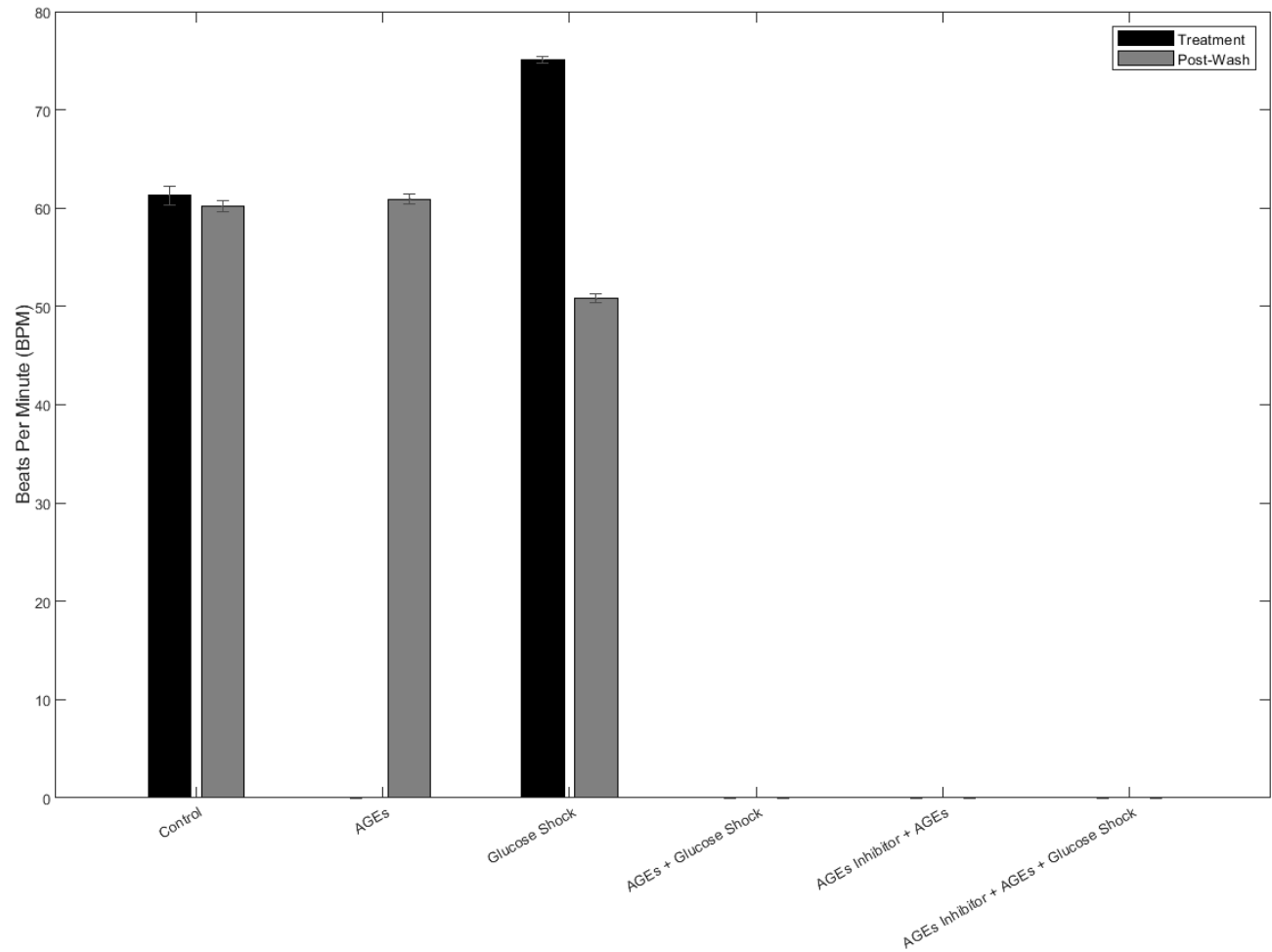
1 Supplementary Figures



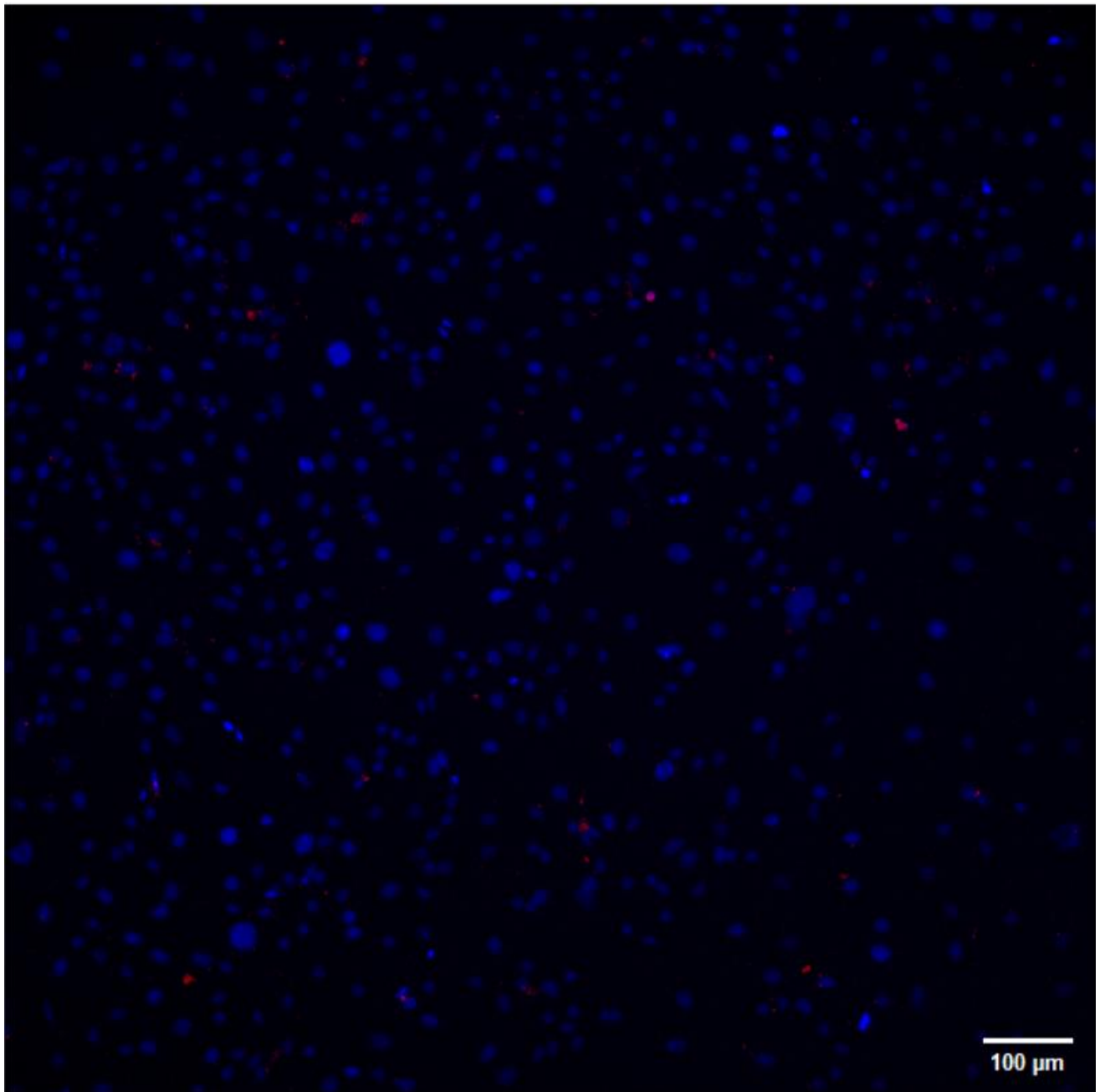
Supplementary Figure 1. AC16 Cardiomyocytes RAGE expression for different experimental conditions: (A) and (C) AGEs inhibitor + AGEs, (B) and (D) AGEs inhibitor + AGEs + Glucose Shock. Scale: 100 μm.



Supplementary Figure 2. Beat rate heat maps and waveforms studied in relation with glucose shock effects of AGEs on iCell Cardiomyocytes (Scale: 0 to 76). Concentration of 50mM D-Glucose for 24 hrs after which their contractility characterization was performed. Controls included wells with cells that did not receive any treatments and were washed and replenished with complete growth medium.



Supplementary Figure 3. Cardiac contractile behavior studied in relation to beats per minute (BPM) in iCell Cardiomyocytes under different experimental conditions after 24 hours of AGEs (500 ug/mL) exposure. Followed by a post-wash with complete growth medium.



Supplementary Figure 4. Immunostaining of Connexin-43 in iCell Cardiomyocytes (no treatment).