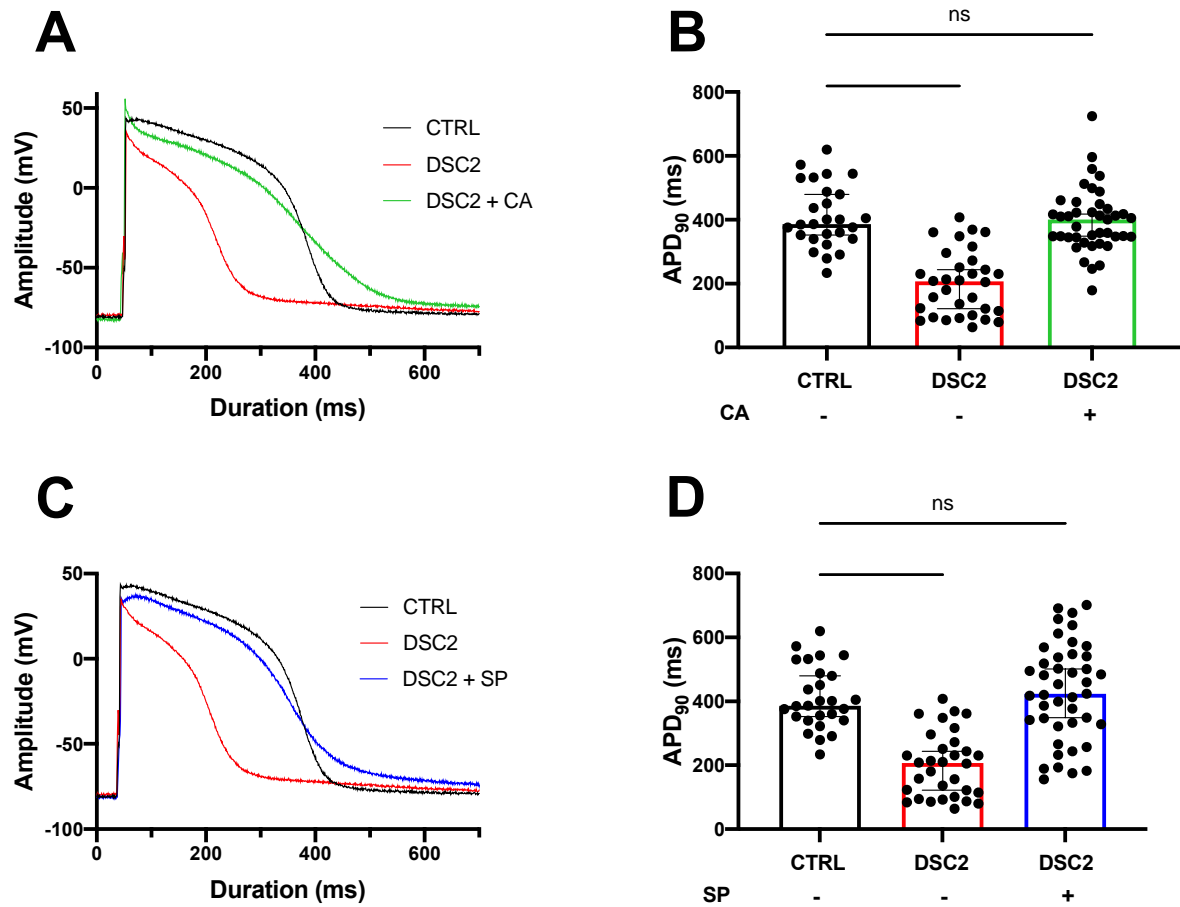


## Supplemental Figure Legends

**Supplemental Figure S1: Effect of Canrenoic acid and Spironolactone on the Action Potential paced at 1Hz.** (A) Raw traces of the AP in the control condition (black)(n=27), mutated DSC2 (red)(n=32), and after incubation with CA (green)(n=43) and (B) Values for the APD at 90% repolarization. (C) Raw traces of the AP in the control condition, DSC2, and after incubation of SP (blue)(n=41) and (D) Values for the APD at 90% repolarization. Results are shown with the median and 95% confidence interval. The stars \* correspond to the difference from the control. \*\*\*\*  $p < .0001$  (Kruskal-Wallis test)

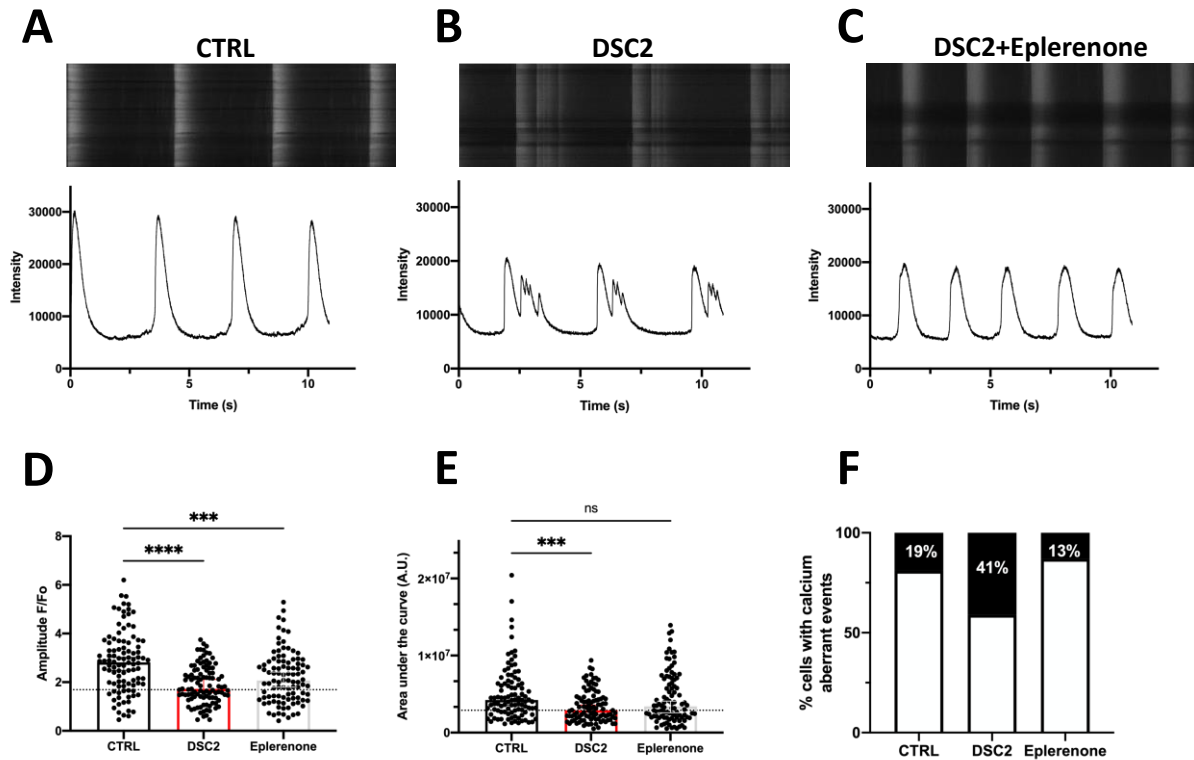
**Supplemental Figure S2: Effect of Eplerenone on calcium handlings.** Examples of spontaneous  $\text{Ca}^{2+}$  transient recorded in control (A) (black; n=100), DSC2 (B) (red; n=101), and DSC2+Eplerenone (C) (grey; n=98). Values of amplitude (E) and (F) the Area Under the Curve (AUC) of  $\text{Ca}^{2+}$  transients and (G) percentage of cells presenting  $\text{Ca}^{2+}$  aberrant events for the different conditions. Results are represented with the median and 95% confidence interval. The stars \* correspond to the difference from the control. \*\*\*\*  $p < .0001$  (Kruskal-Wallis test)

## Supplemental Figure S1



**Supplemental Figure S1: Effect of Canrenoic acid and Spironolactone on the Action Potential paced at 1Hz.** (A) Raw traces of the AP in the control condition (black)(n=27), mutated DSC2 (red)(n=32), and after incubation with CA (green)(n=43) and (B) Values for the APD at 90% repolarization. (C) Raw traces of the AP in the control condition, DSC2, and after incubation of SP (blue)(n=41) and (D) Values for the APD at 90% repolarization. Results are shown with the median and 95% confidence interval. The stars \* correspond to the difference from the control. \*\*\*\*  $p < .0001$  (Kruskal-Wallis test)

## Supplemental Figure S2



**Supplemental Figure S2: Effect of Eplerenone on calcium handlings.** Examples of spontaneous Ca<sup>2+</sup> transient recorded in control (A) (black; n=100), DSC2 (B) (red; n=101), and DSC2+Eplerenone (C) (grey; n=98). Values of amplitude (E) and (F) the Area Under the Curve (AUC) of Ca<sup>2+</sup> transients and (G) percentage of cells presenting Ca<sup>2+</sup> aberrant events for the different conditions. Results are represented with the median and 95% confidence interval. The stars \* correspond to the difference from the control. \*\*\*\*  $p < .0001$  (Kruskal-Wallis test)