

**Biostatistics statement**

All the data are expressed as mean  $\pm$  SD or SEM. Differences between ND vs. HFD and control vs. palmitate were tested using two-sample t-tests. One-way ANOVA followed by Bonferroni post-hoc multiple comparisons to assess significant differences between 3 or more groups (Graphpad-Ver.6). For body weight and blood glucose measurements, area under the curve (AUC) across all the time points was calculated. A series of 2 gene (WT vs. KO) X 2 treatment (TRT) (no vs. yes) ANOVAs with interaction were used to determine the effect of palmitate on NLRP3 and IL1 $\beta$ . A Bonferroni post-hoc multiple comparison test was used for significant interactions. Significance for all tests was determined at  $\alpha=0.05$