



Figure 2 – Figure Supplement 1. Dynamics of lipid mediators after volumetric muscle loss injury **A)** DPGP mixture model-based clustering of mean analyte abundance fold-change z-scores across injury timepoints. Black lines are cluster means and the gray bars show 2 standard deviations around the mean. Color scheme for each cluster corresponds to figure 2 DPGP heatmap **B-F)** Changes of pooled lipid mediators metabolites per injury type and timepoint expressed in pmol/mg. Two-way paired ANOVA was used to estimate statistical differences between injury and timepoints. Graphs show mean \pm SEM, * < 0.05 between timepoints of matched injury timepoint and # < 0.05 between different injury types at a certain timepoint. **B)** Sum of 12-HETE, 12-HEPE, 14-HDoHE. 12-HETE is commonly related to pro-inflammatory effects while 14-HDoHE is a known pathway marker for Maresin 1. **C)** Sum of 15-HETE, 15-HEPE, 17-HDoHE. 15-HETE is commonly related to pro-inflammatory effects while 17-HDoHE is a known pathway marker for Resolvings. **D)** Sum of PGI₂ (6kPGF_{1α}), PGF_{2α}, PGE₂, PGD₂, TXB₂. Prostaglandins and thromboxanes have been commonly related to pro-inflammatory effects. **E)** Sum of EpETrEs, DiHETrEs, EpETEs, EpDPEs. Cytochrome P450 epoxygenase pathway has been related to anti-inflammatory effects that remains as an understudied pathway. **F)** Sum of 5-HETE, 5-HEPE, 4-HDoHE, 7-HDoHE. 5-HETE is commonly related to pro-inflammatory effects.