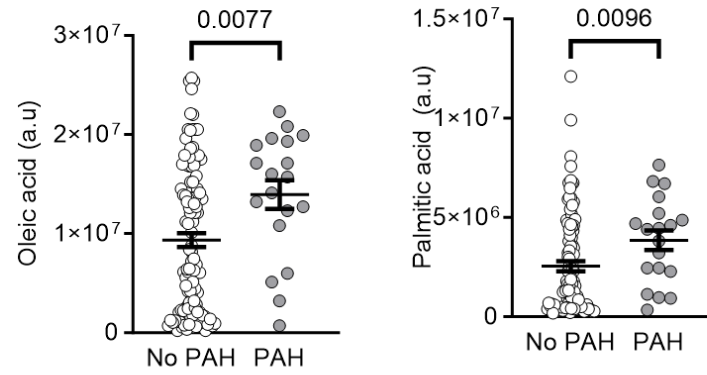
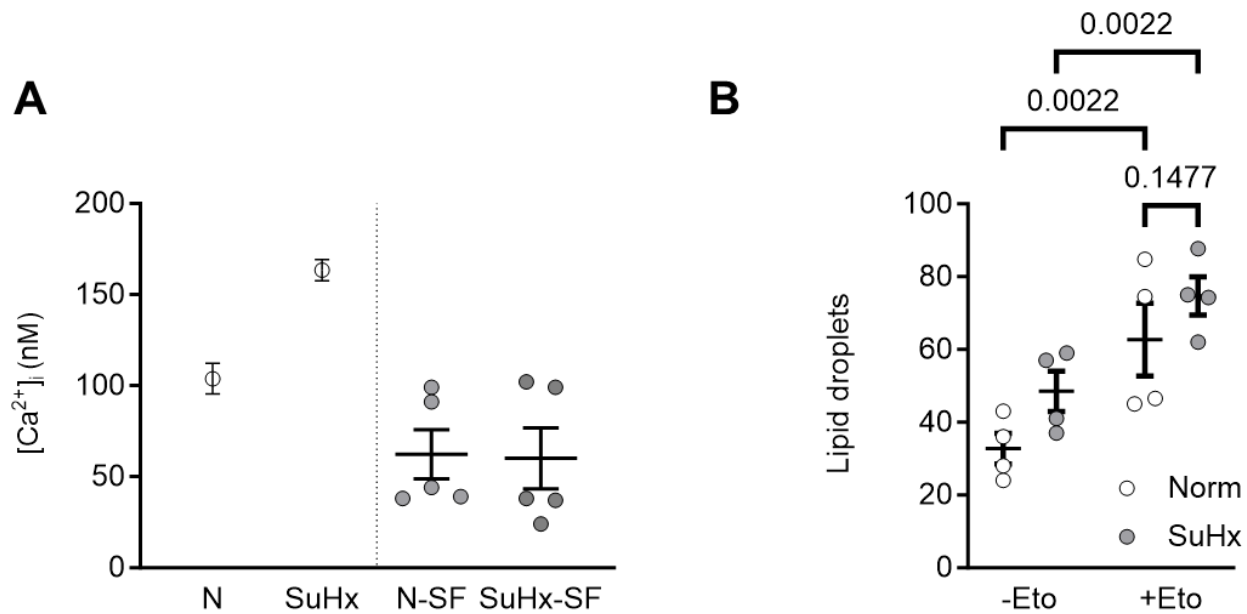


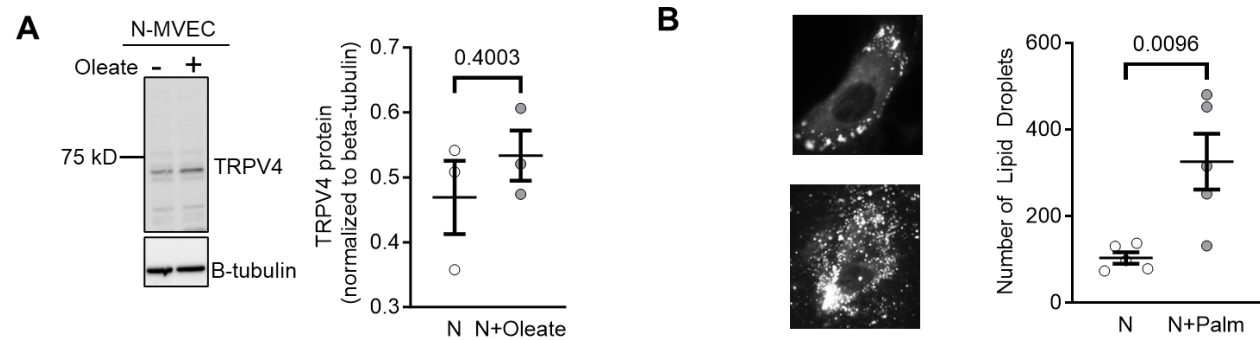
B

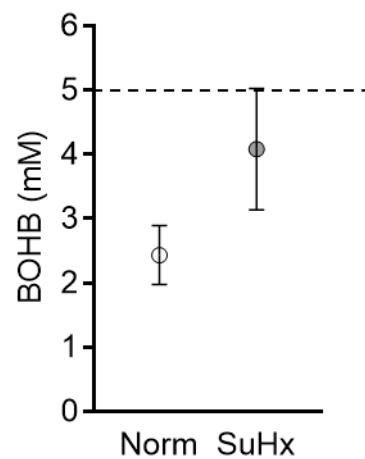


Supplementary Figure 1: A) Results of geneset enrichment analysis (GSEA) showing enrichment, in PAH lung samples, of transcripts assigned to gene ontology terms associated with metabolism and processing of fatty acids/acyl-CoAs. **B)** Levels of long chain fatty acid oleate and palmitate in the serum of patients without PH and PAH.



Supplementary Figure 2: A) Dot plots showing mean(±SEM) basal $[Ca^{2+}]_i$ in N- and SuHx-MVECs (also shown in Figure 4A), and scatter plot showing basal $[Ca^{2+}]_i$ in N- and SuHx-MVECs exposed to serum-free (SF) media. **B)** Lipid droplet numbers in N- and SuHx-MVECs with and without treatment with FAO inhibitor Etomoxir (Eto).





Supplementary Figure 4: Raw values for intracellular BOHB concentrations in N- (Norm) and SuHx-MVECs. Dashed line represents BOHB concentration chosen for treatment in subsequent experiments.