

Supplemental Information

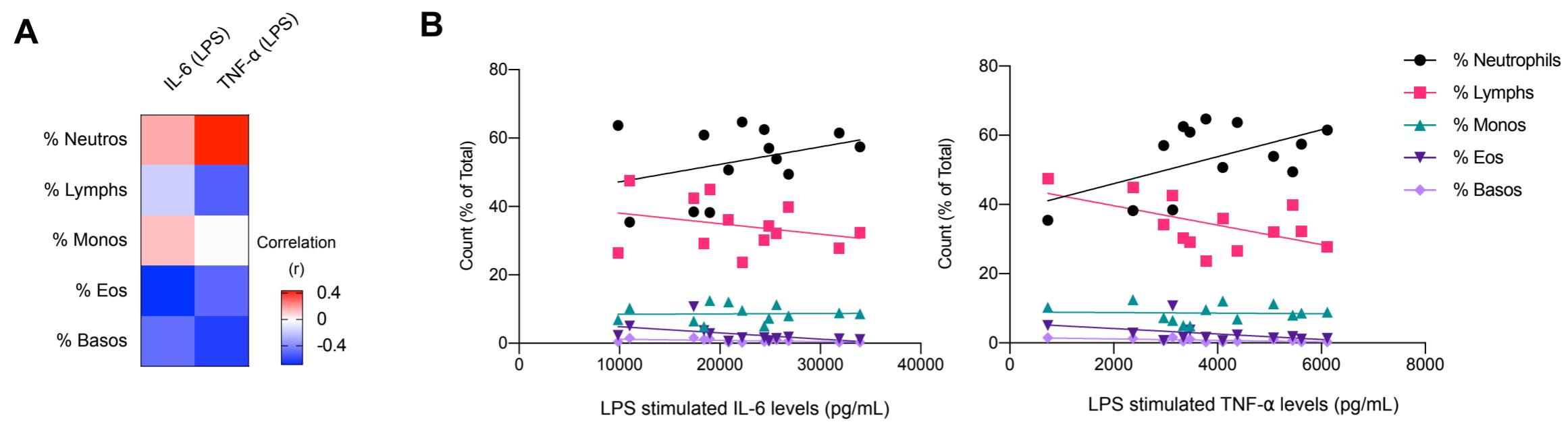
Figure S1

Figure S1. Correlation between blood cell subtypes at baseline and LPS-stimulated cytokine response. (A) Correlation coefficient (Spearman r) between % baseline cell subtype distribution in and LPS-stimulated IL-6 and TNF- α levels in whole blood from $n=13$ individuals. Positive correlations are red and negative correlations are blue. (B) Spearman correlation along with linear regression lines showing direction of association between stimulated cytokines (IL-6 and TNF α) and distribution of cell subtypes.

Figure S2

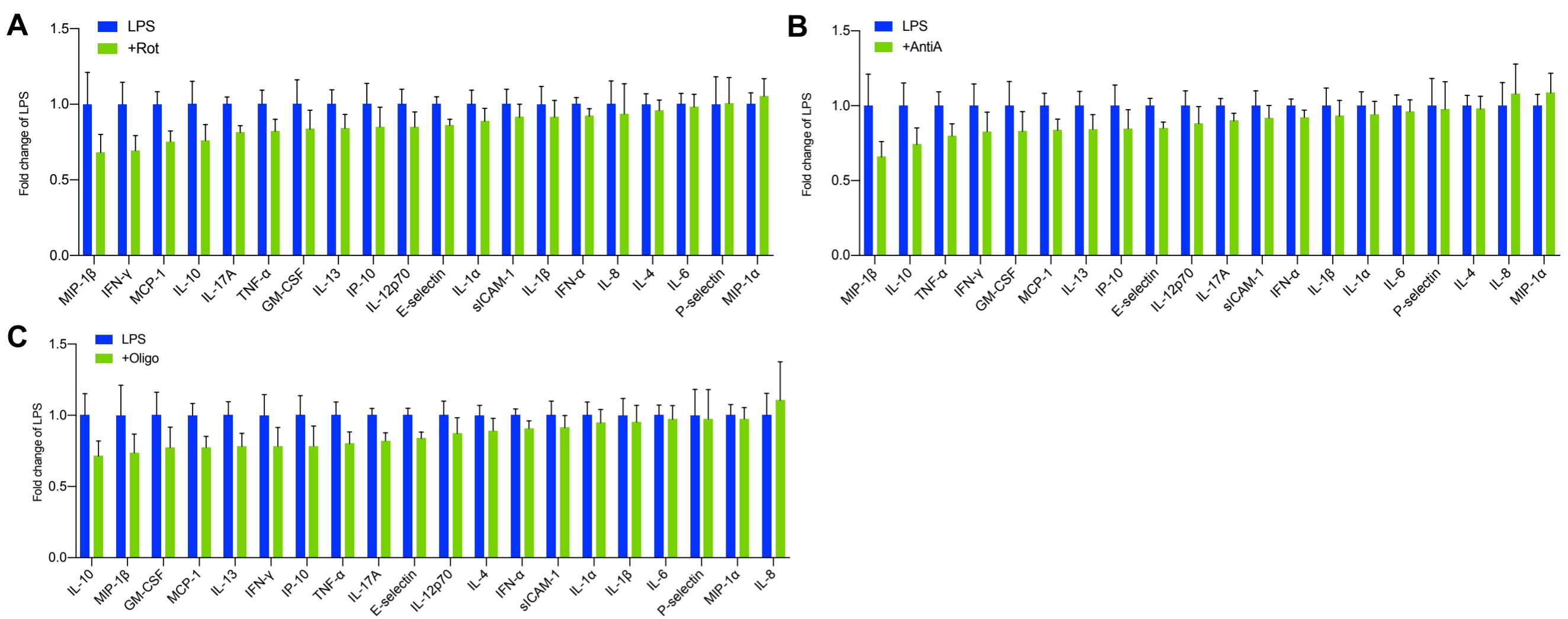
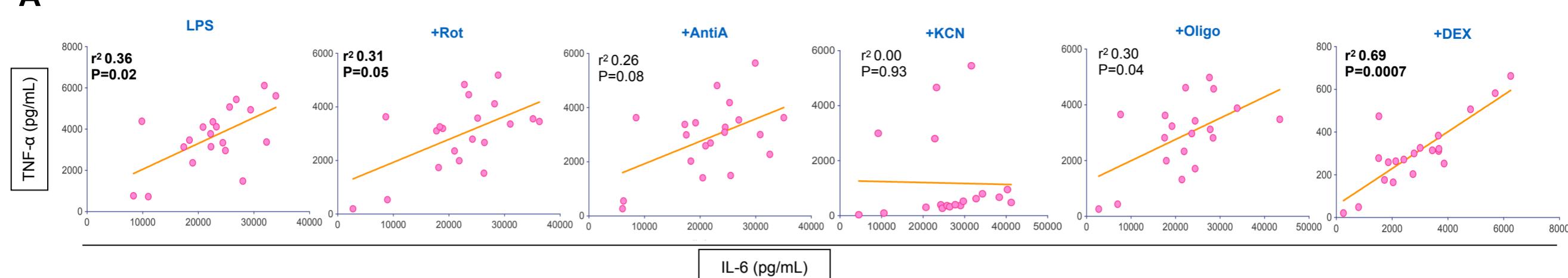


Figure S2. Mitochondrial respiration inhibitors alter LPS-stimulated cytokine response. (A-C) Fold change of LPS-stimulated cytokine levels upon respiration inhibition (green bars) by Rotenone (Complex I), Antimycin A (Complex III) and Oligomycin (Complex V) relative to LPS only (blue bars). The cytokines are ranked from most- to least- suppressed by an inhibitor. Data are mean \pm SEM of n=19-20 individuals.

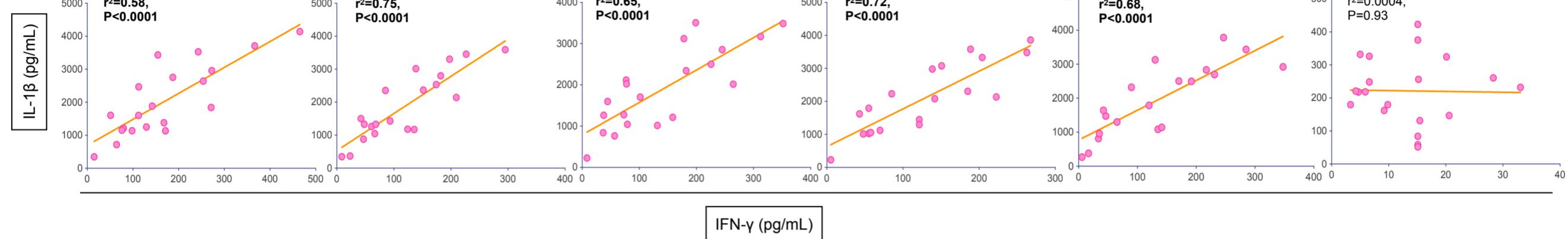
Figure S3

A

Spearman rank correlation and linear regression between IL-6 and TNF- α



B



C

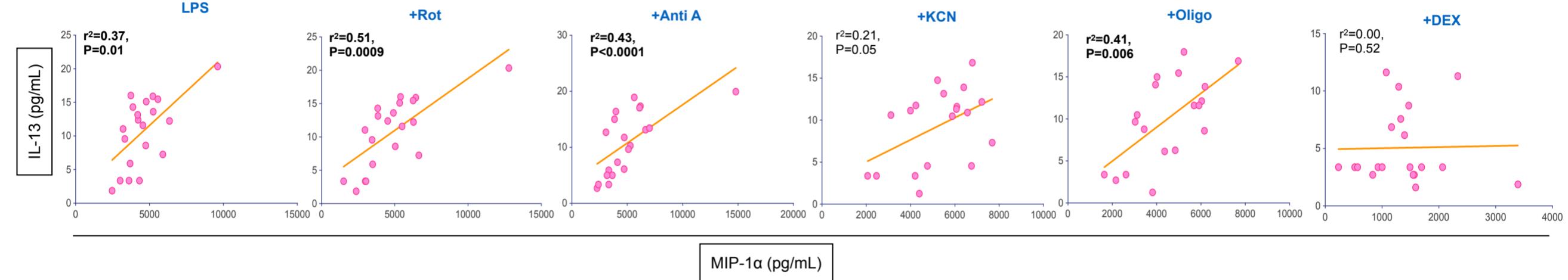


Figure S3. Mitochondrial respiration defects alter inter-cytokine associations in leukocytes. (A-C) Effect of mitochondrial respiration inhibition and DEX treatment on inter-cytokine correlations. The P values and r^2 are derived from Spearman rank correlation and linear regression respectively. Data presented are from n=19-20 and significant correlations are shown in bold.

Figure S4

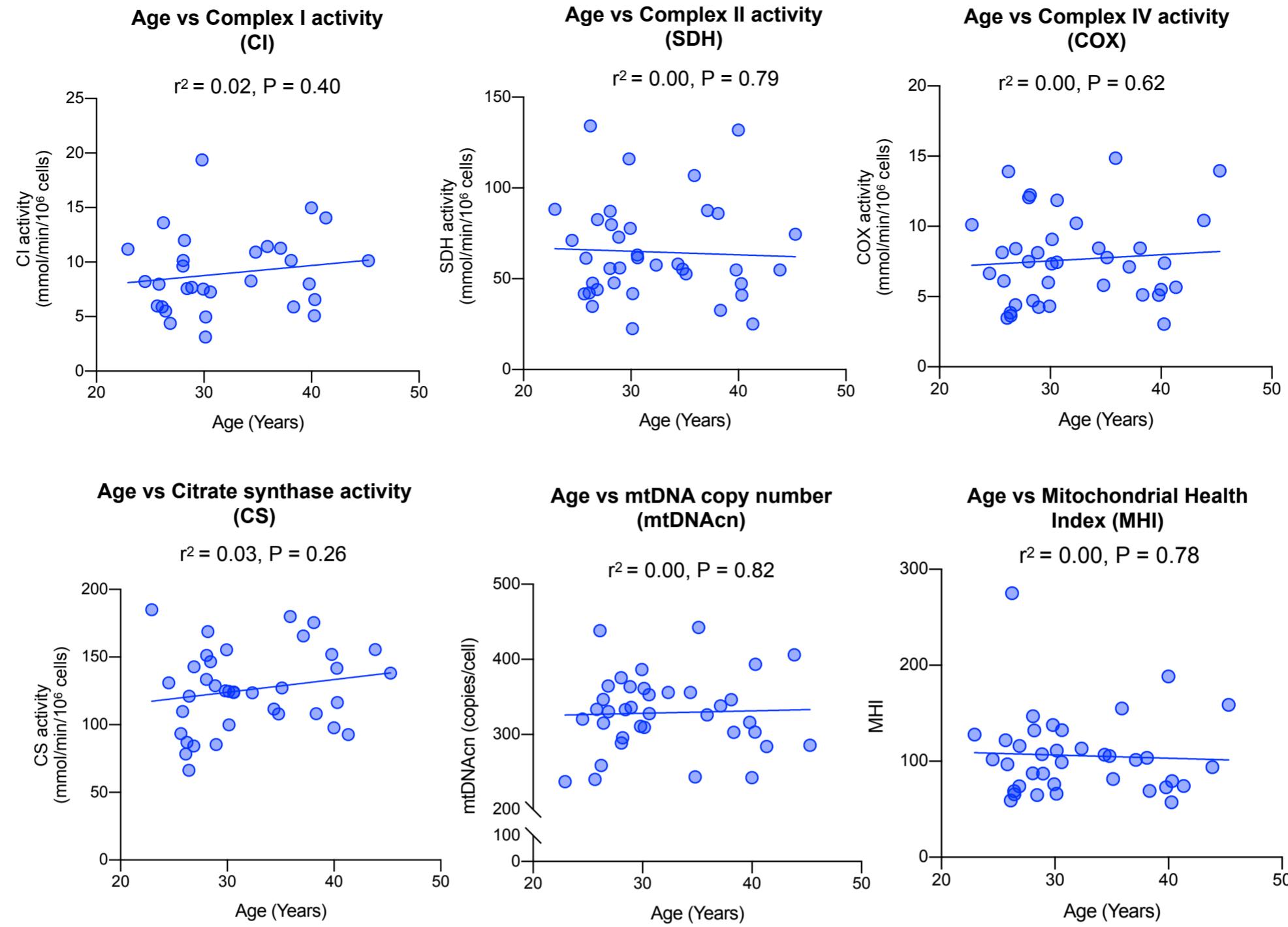


Figure S4. Linear regressions (Pearson r) between the age of participants in Cohort 2 and their baseline mitochondrial measures. Age does not correlate with mitochondrial enzyme activities of Complex I, II (SDH), IV (COX), mitochondrial content (CS), copy number (mtDNAcn) and mitochondrial health (MHI). n=37 except mtDNAcn (n=30).