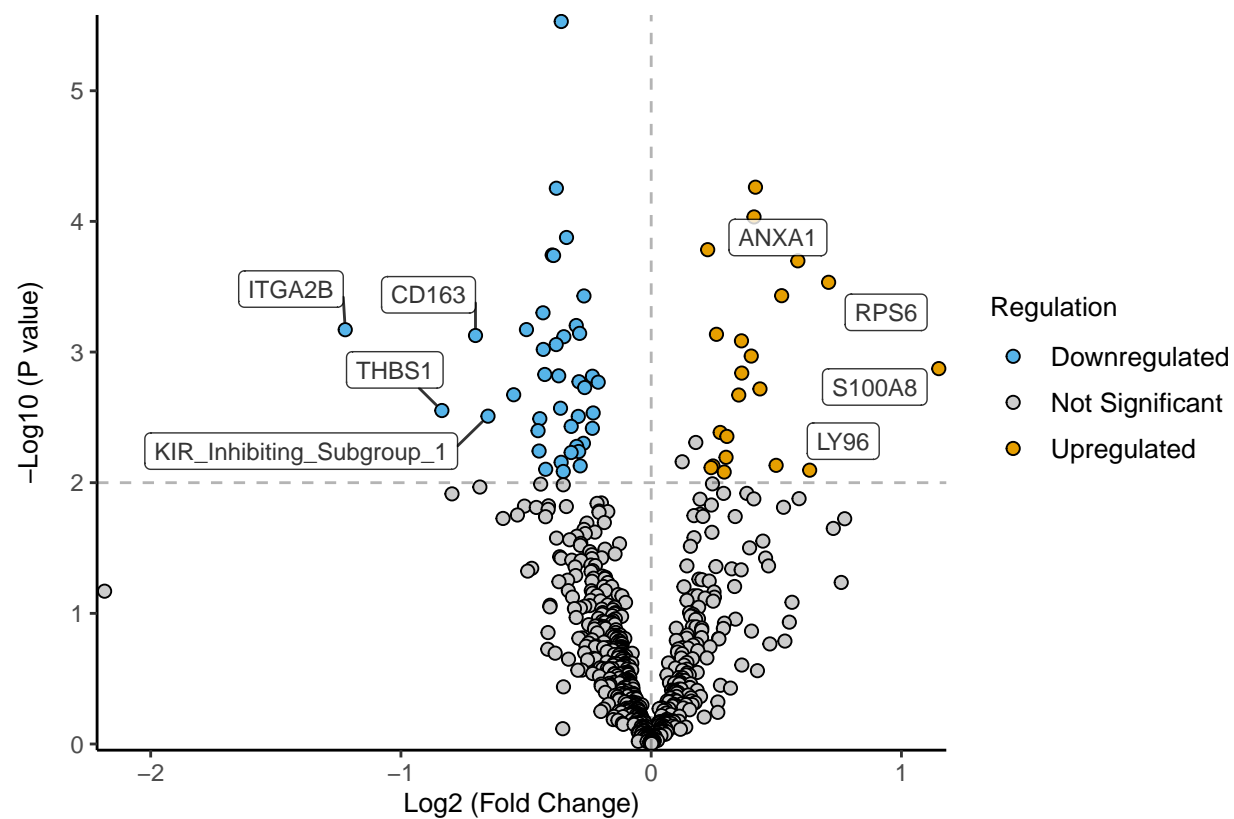
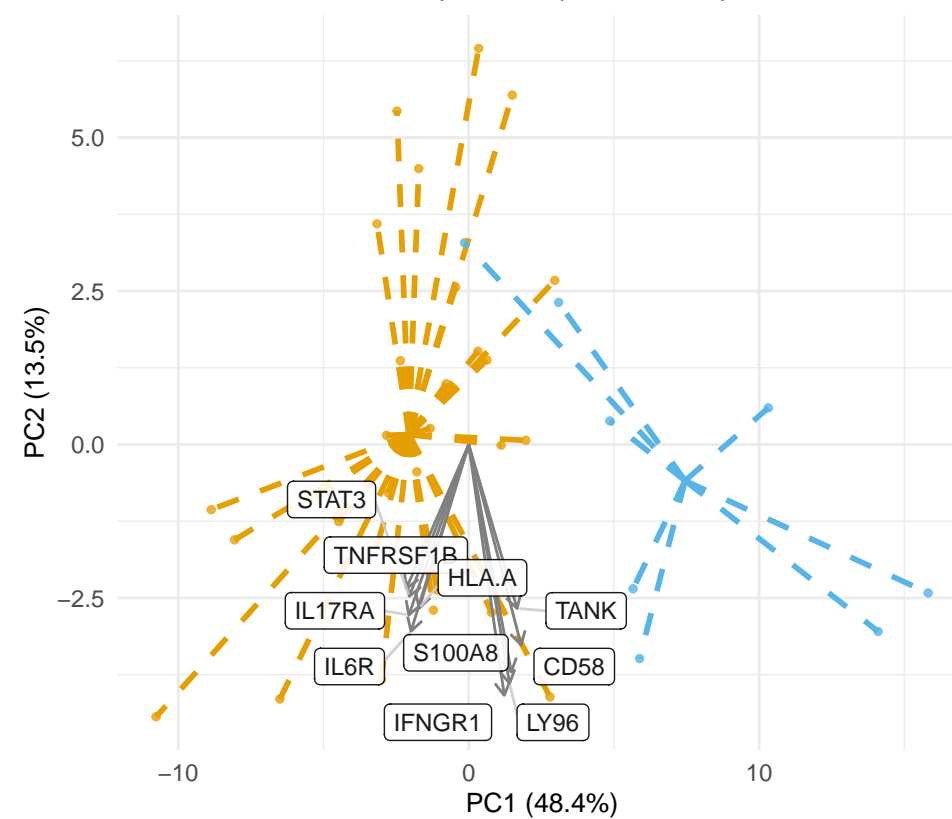
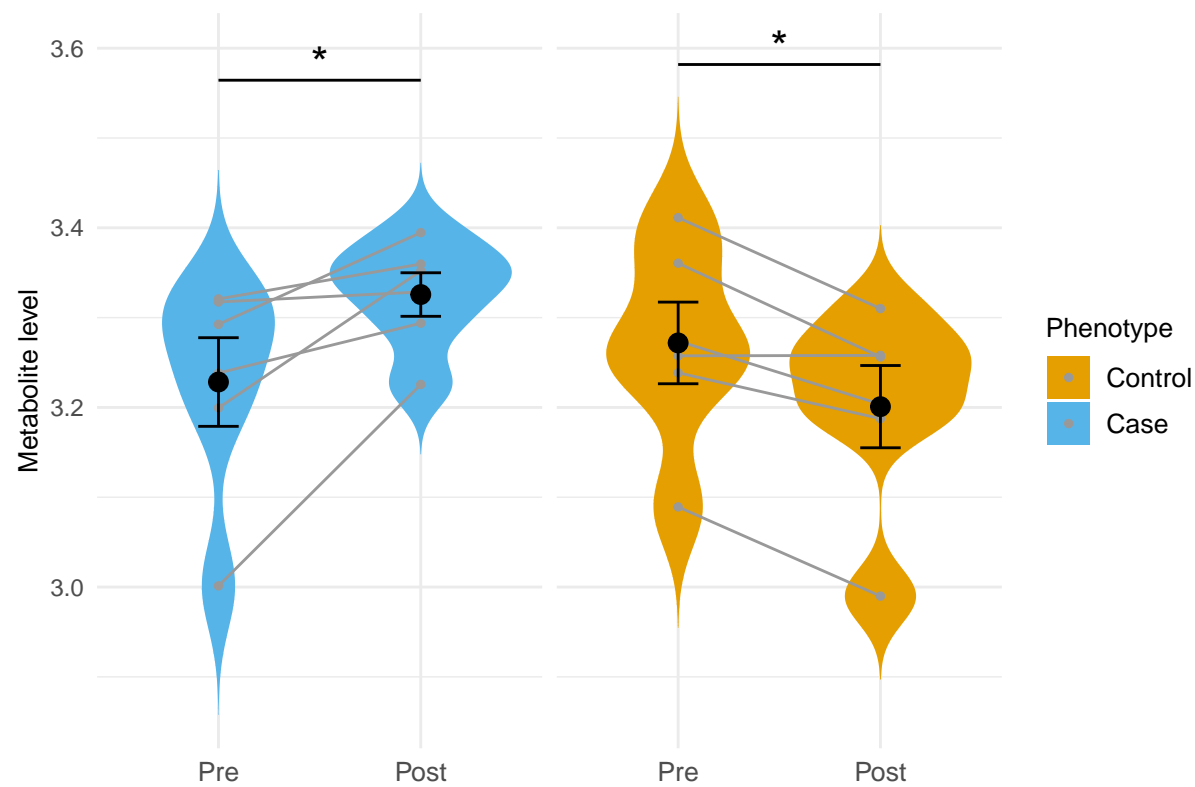


**A****Volcano Plot DEGs****B****PCA of DEGs (10 most influential genes)**PERMANOVA:  $R^2 = 0.242$ ,  $p = 0.001$  | PERMDISP  $p = 0.14$ **C****Oxoglutarate Paired T-test****D****PCA of Metabolites (10 most influential metabolites)**PERMANOVA:  $R^2 = 0.181$ ,  $p = 0.001$  | PERMDISP  $p = 0.542$ 