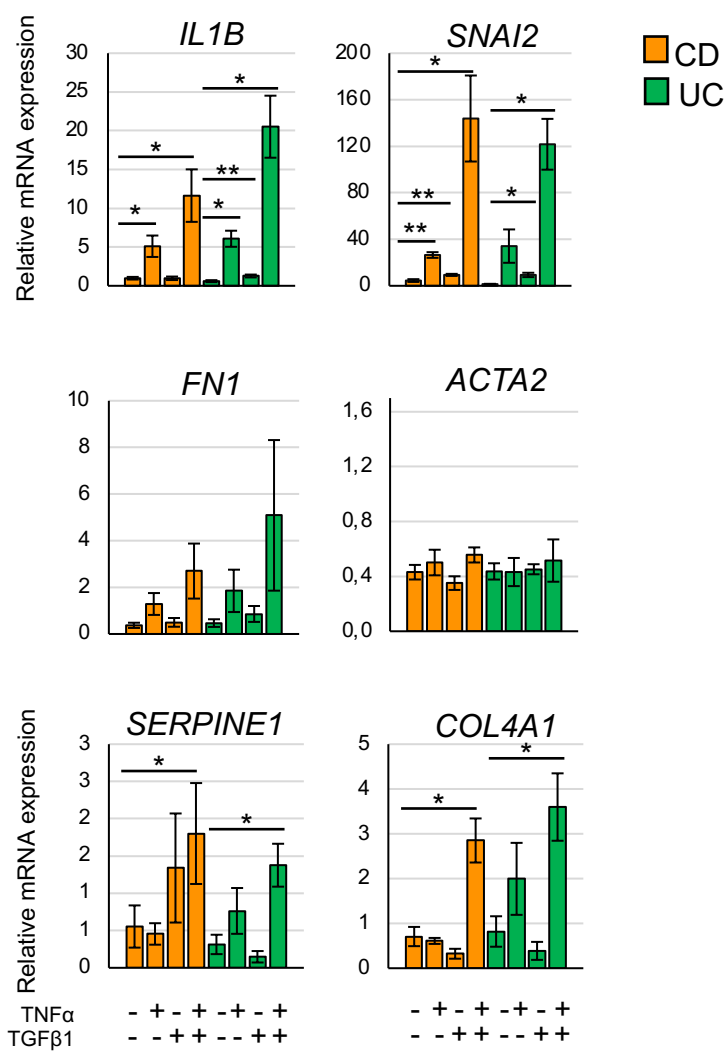


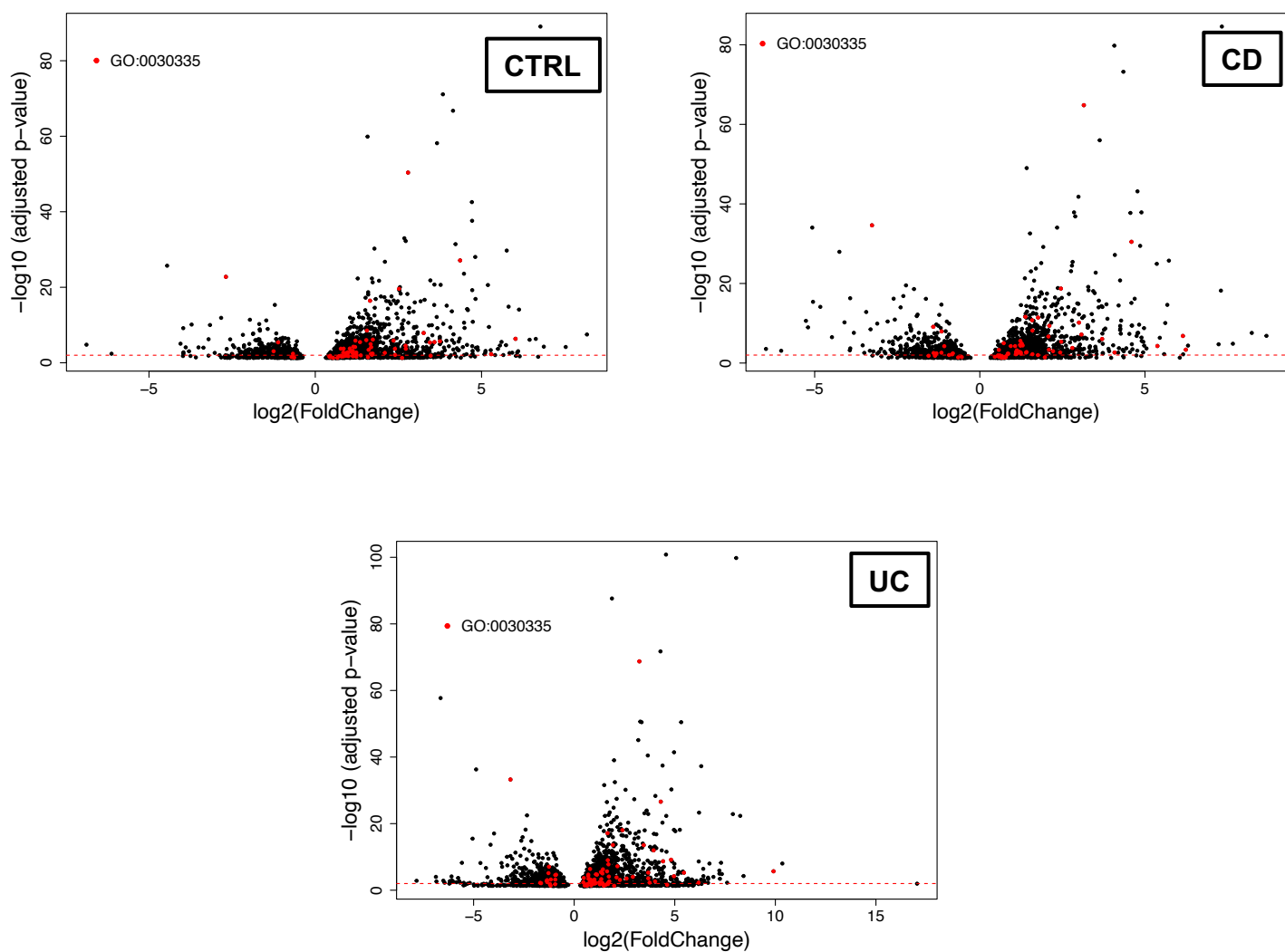
Supplementary Figure S1



Supplementary Figure S1. The combination of TNF-α and TGF-β1 is more efficient than single cytokines in stimulating inflammatory, mesenchymal and fibrotic markers in IBD-PDOs

CD- and UC-PDOs were cultured for 4 days with TNF-α (100 ng/ml), for 3 days with TGF-β1 (50 ng/ml), for 24 hours with TNF-α (100 ng/ml) followed by a cocktail TNF-α (100 ng/ml) and TGF-β1 (50 ng/ml) for subsequent 3 days (TNF-α +TGF-β1) or with vehicle. The expression of inflammatory (*IL1B*), mesenchymal (*SNAI2*), and fibrotic (*FN1*, *ACTA2*, *SERPINE1* and *COL4A1*) genes were assessed by RT-qPCR. Data are expressed as mean ± SEM. * = p-value ≤ 0.05; ** = p-value ≤ 0.01 n = 3.

Supplementary Figure S2



Supplementary Figure S1. TNF- α and TGF- β 1 up-regulate genes that positively control cell migration.

Volcano plots display DEGs (adj P-value < 0.05) between TNF- α and TGF- β 1 treated PDOs and its controls in CTRL-, CD- and UC-PDOs. DEGs belonging to the *GO:0030335~positive regulation of cell migration* are highlighted in red.

Supplementary table legend.

Supplementary table 1. List of RNA-seq gene counts for each sample.

Supplementary table 2. DEGs (adj P-value < 0.05) between CTRL and CTRL (TNF α + TGF β 1) PDOs

Supplementary table 3. DEGs (adj P-value < 0.05) between CD and CD (TNF α +TGF β 1) PDOs

Supplementary table 4. DEGs (adj P-value < 0.05) between UC and UC (TNF α +TGF β 1) PDOs

Supplementary table 5. Gene Ontology (GO) term enrichment analysis of DEGs between CTRL and CTRL (TNF α + TGF β 1) PDOs (FDR< 0.05).

Supplementary table 6. Gene Ontology (GO) term enrichment analysis of DEGs between CD and CD (TNF α +TGF β 1) PDOs (FDR< 0.05).

Supplementary table 7. Gene Ontology (GO) term enrichment analysis of DEGs between UC and UC (TNF α +TGF β 1) PDOs (FDR< 0.05).

Supplementary table 8. DEGs (adj P-value < 0.05) between CD-PDOs treated with TNF α and TGF β 1 and CTRL-PDOs treated with TNF α and TGF β 1.

Supplementary table 9. DEGs (adj P-value < 0.05) between CD-PDOs treated with TNF α and TGF β 1 and UC-PDOs treated with TNF α and TGF β 1.

Supplementary table 10. Functional annotation and enrichment using DAVID Knowledgebase v2023q3 (FDR< 0.05) of genes upregulated in fibrotic CD-PDOs as compared to fibrotic CTRL-, and UC-PDOs or both.