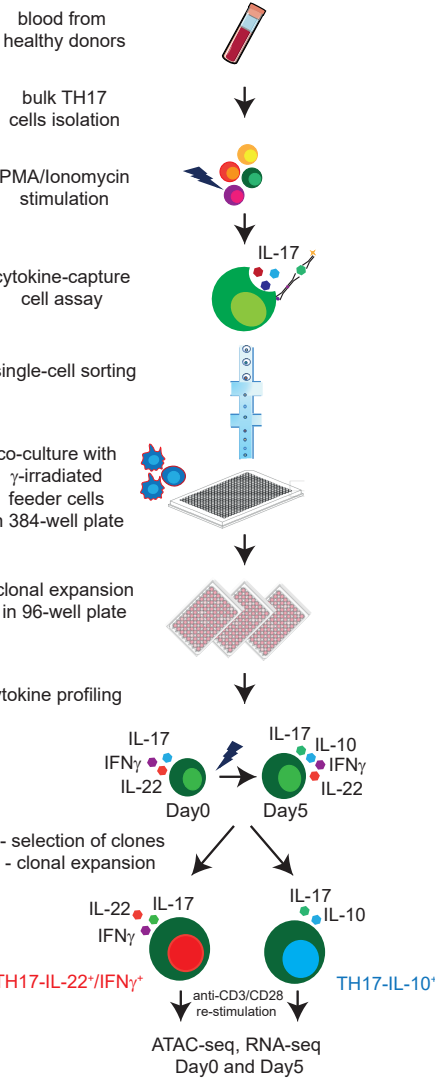
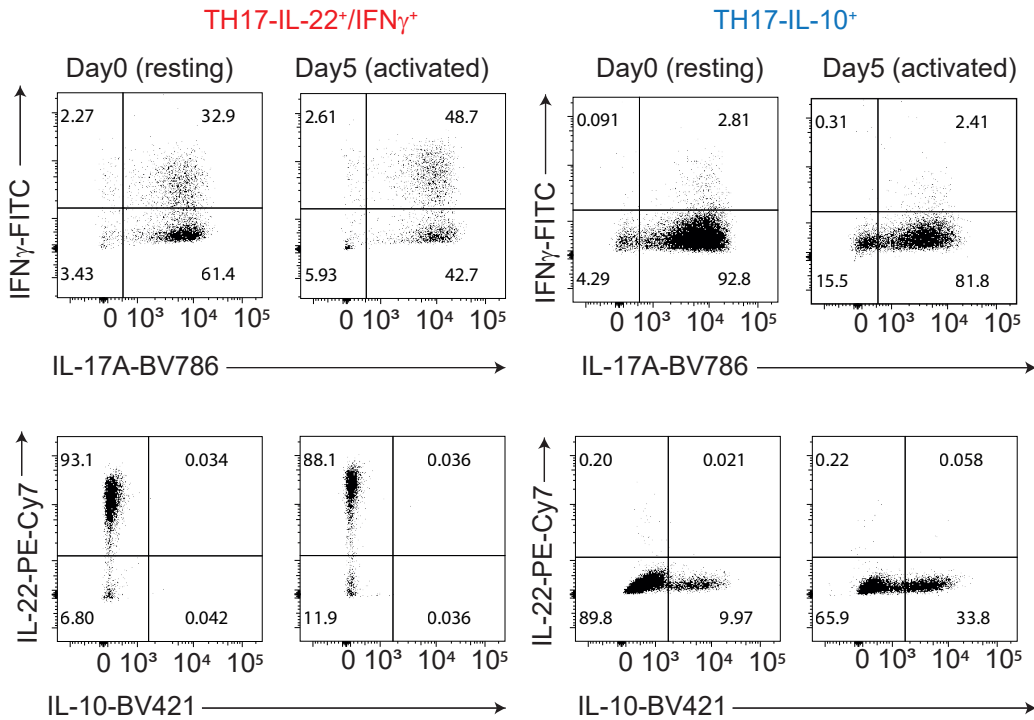


Figure 1

A



B



C

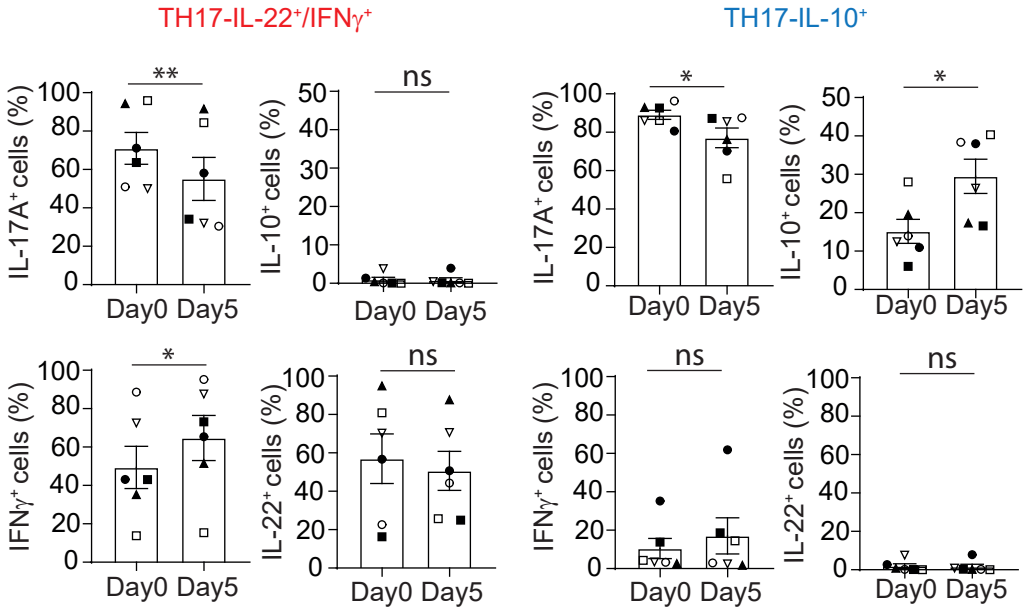


Figure 2

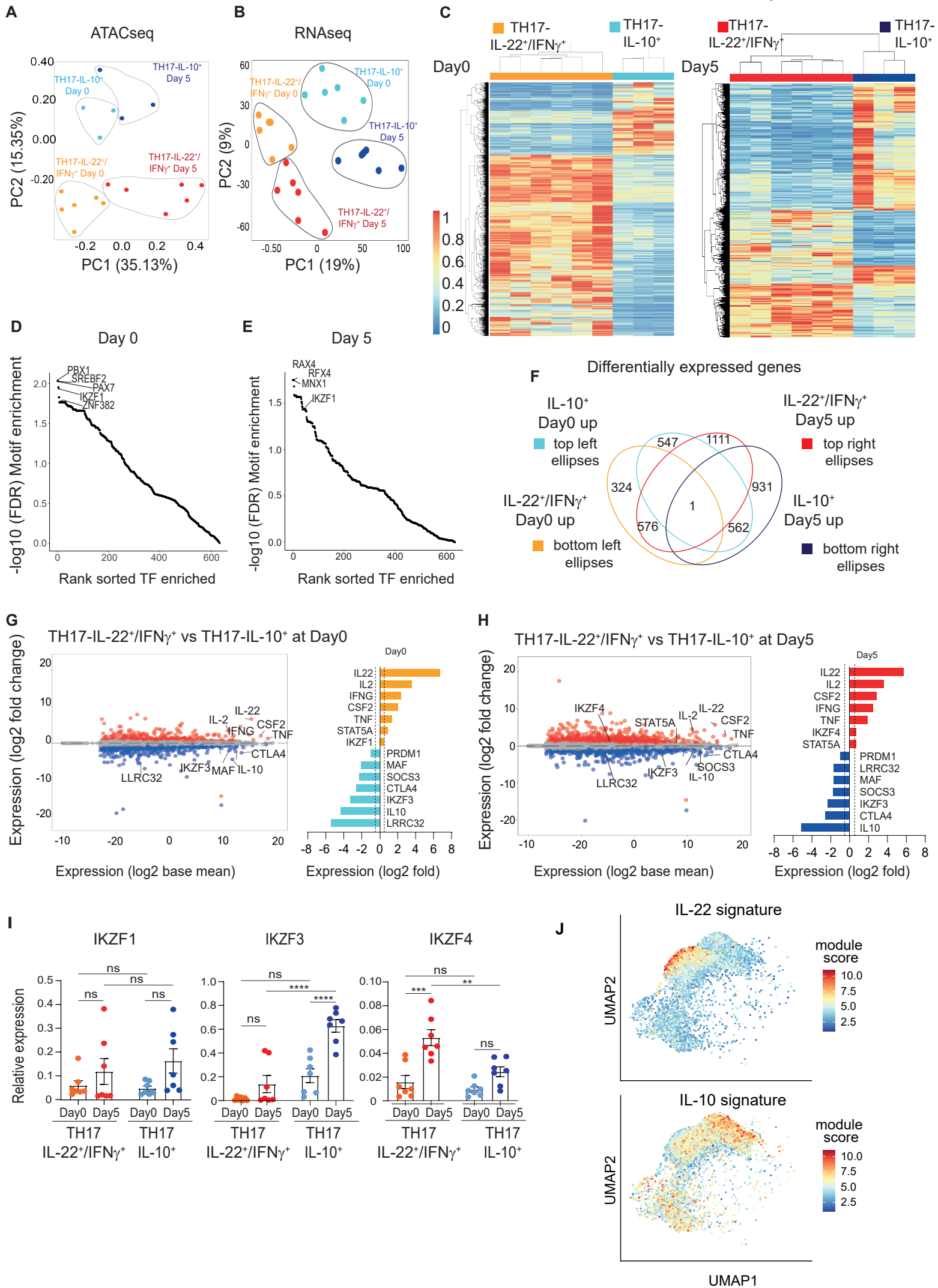


Figure 3

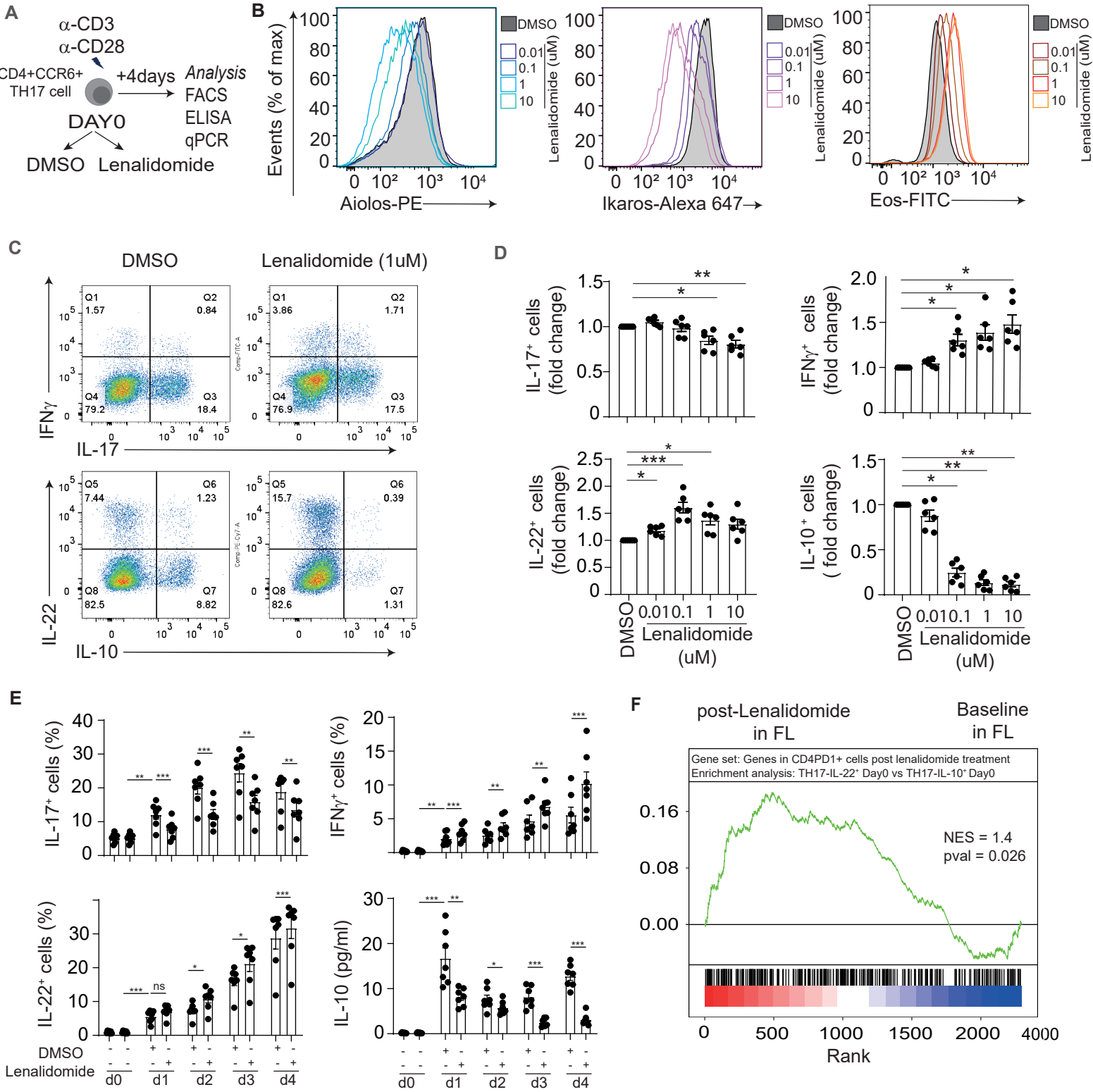


Figure 4

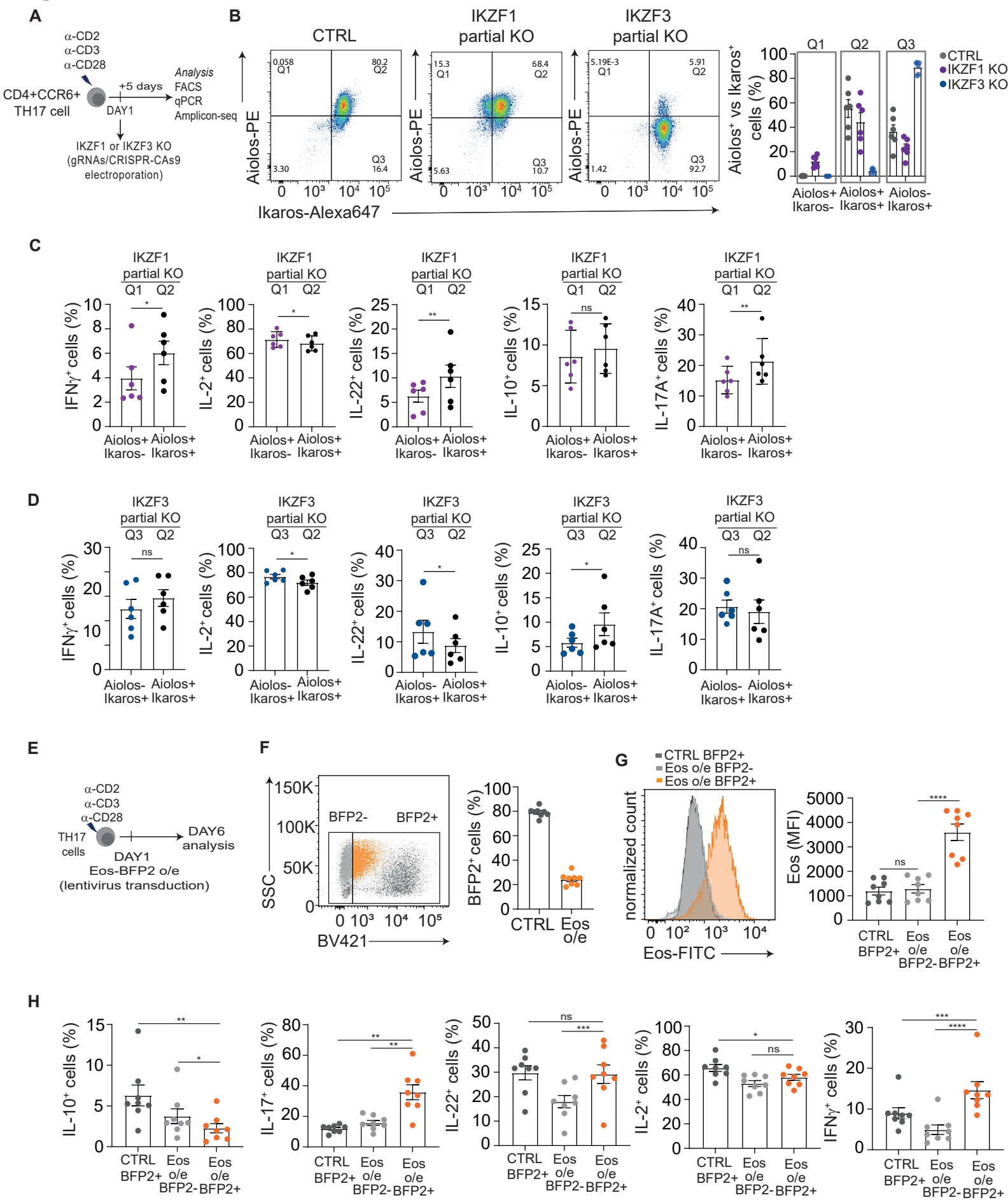
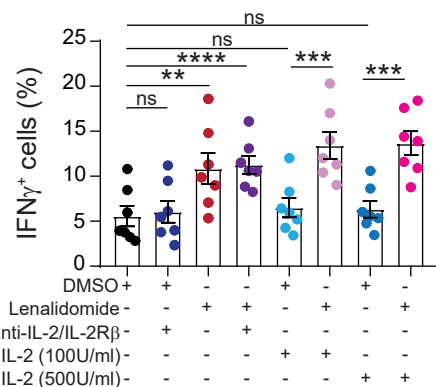
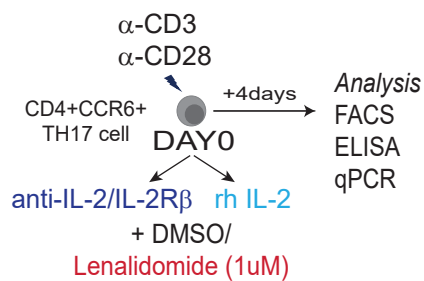
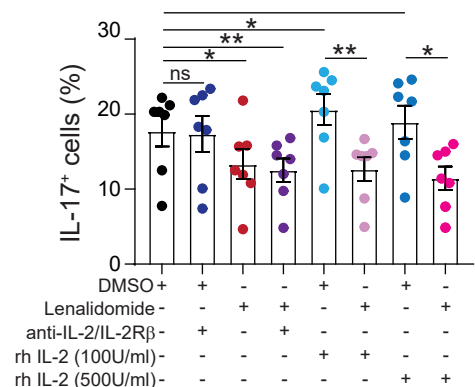
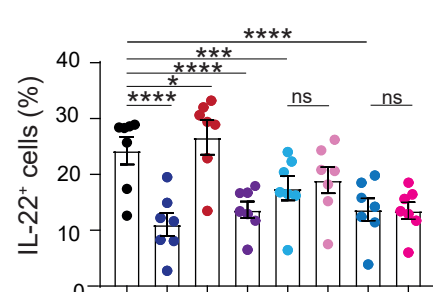
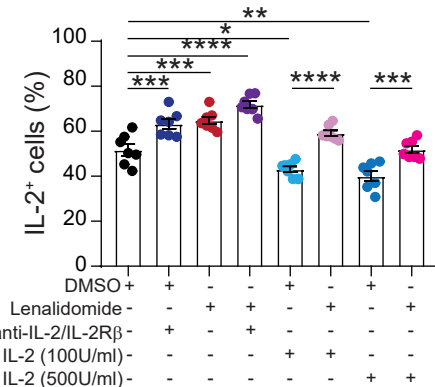
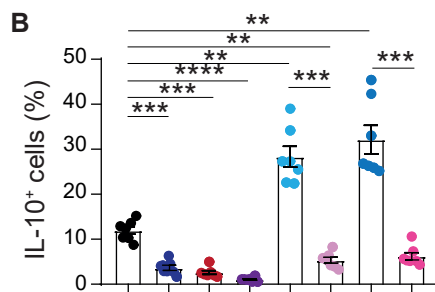


Figure 5

A



B



C

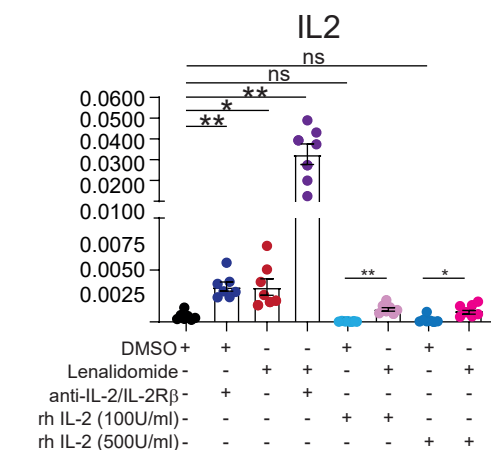
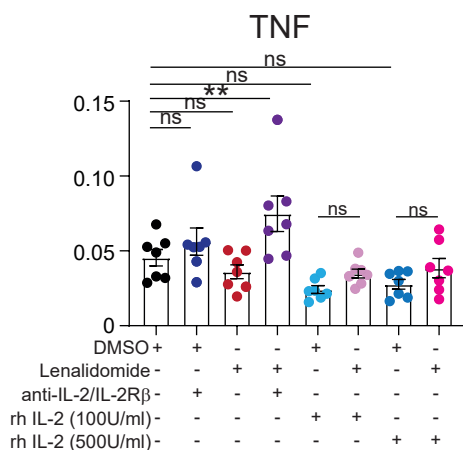
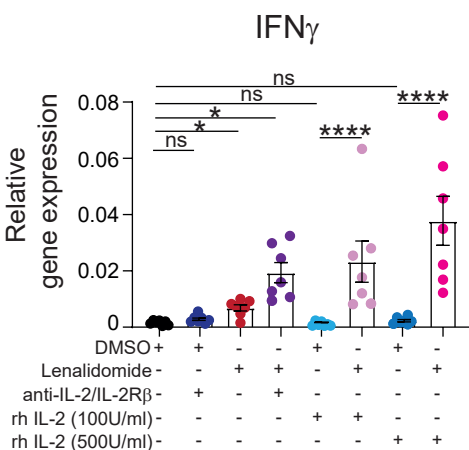
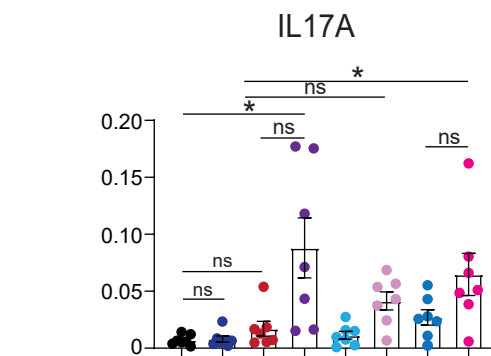
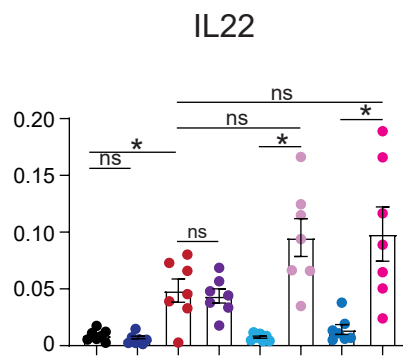
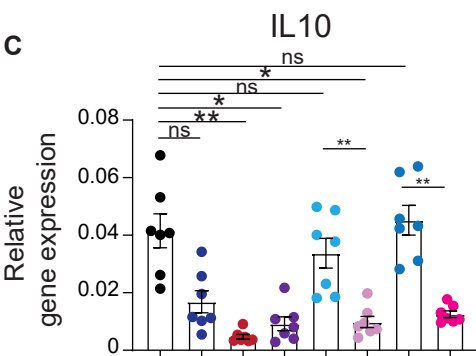


Figure 6

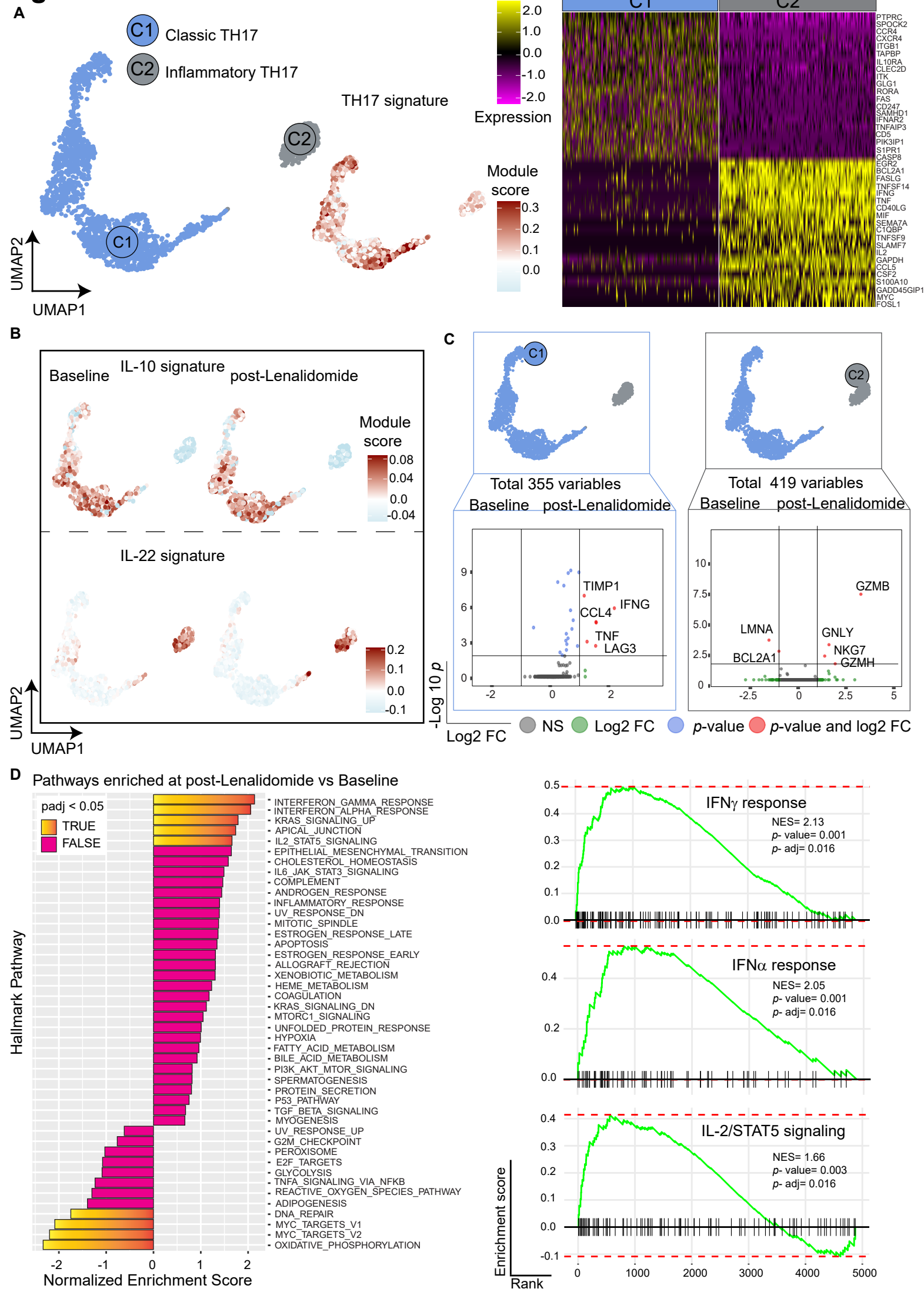


Figure S1

A

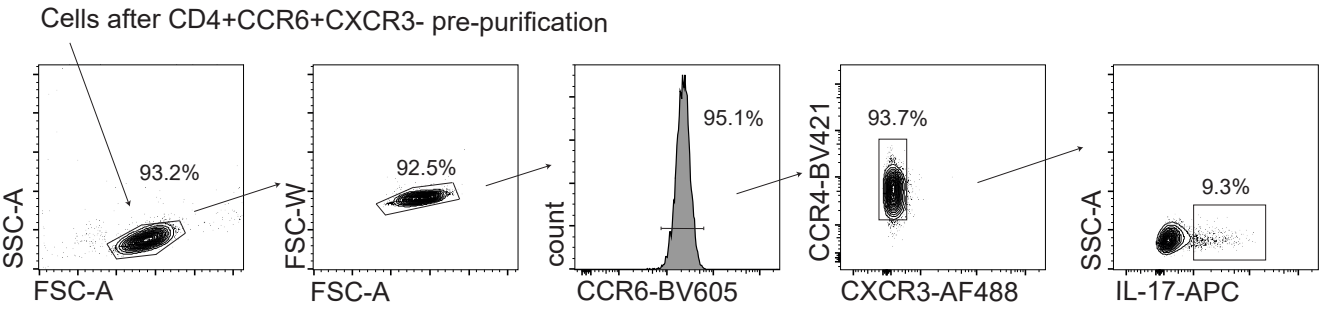
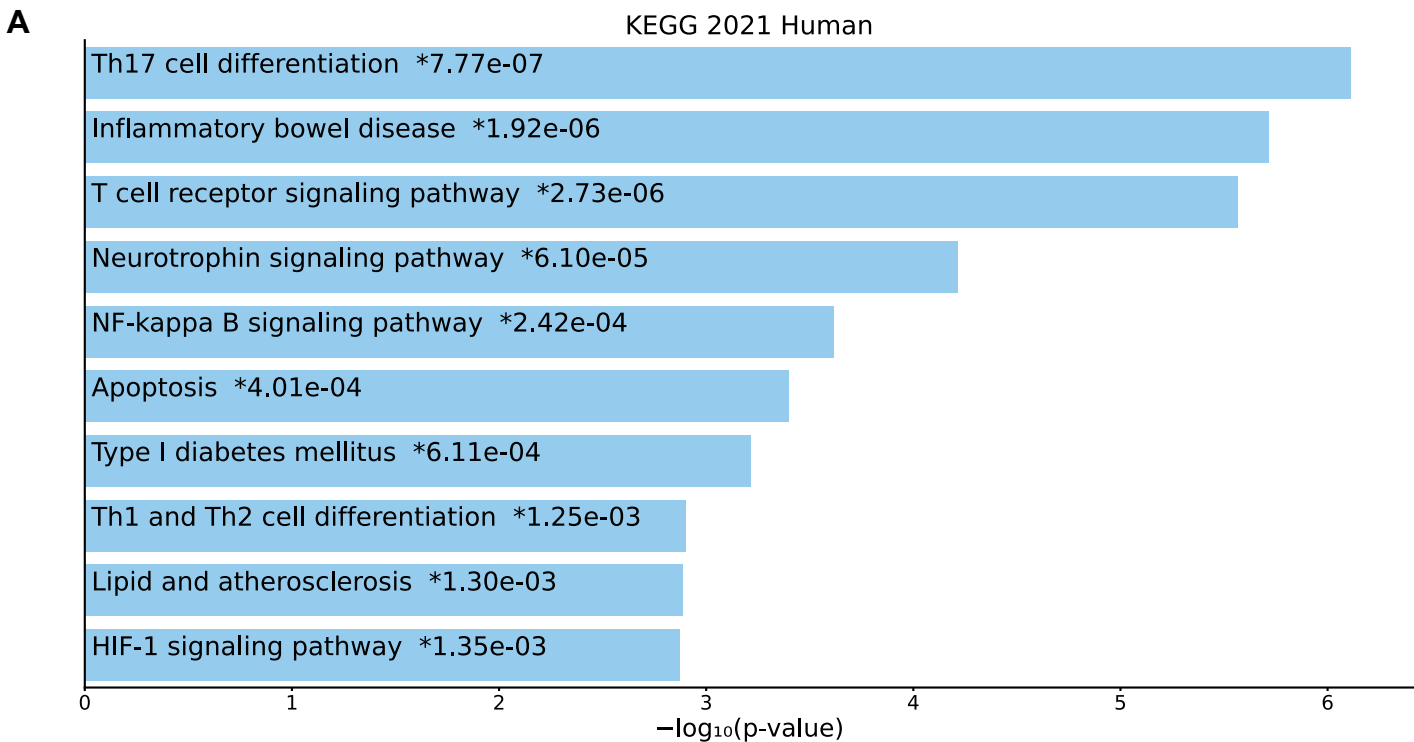


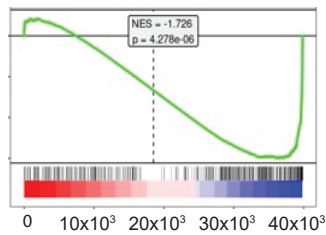
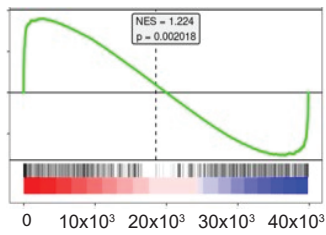
Figure S2

The pathways related to the list of genes containing IKZF1 binding motif (n= 689)

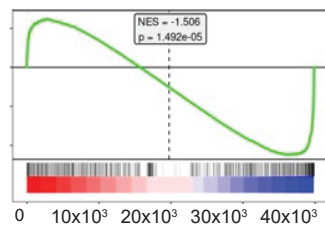
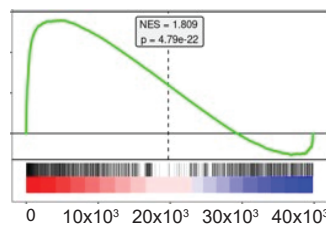


B

Top 10 enriched pathways	The overlap_genes from the top 10 significant terms by KEGG 2021 Human
Th17 cell differentiation	[IL21, IL22, SMAD3, IL23R, RORC, RORA, IL1RAP, IL2, MAPK13, IKBKB, PPP3CA, IFNG, IL23A, RARA, PRKCO, IL12RB1]
Inflammatory bowel disease	[IL21, IL22, SMAD3, IFNG, IL23A, IL23R, RORC, STAT4, RORA, IL12RB1, IL2, IL18R1]
T cell receptor signaling pathway	[VAV3, ITK, CBLB, IL2, MAPK13, IKBKB, PPP3CA, PTPRC, IFNG, AKT3, NCK2, PRKCO, FYN, MAP3K14, CARD11]
Neurotrophin signaling pathway	[NTRK1, NTRK2, CAMK2D, MATK, FASLG, MAPK13, IKBKB, IRAK2, AKT3, MAPKAPK2, RAPGEF1, CAMK2G, SH2B3, MAP3K5]
NF-kappa B signaling pathway	[LYN, IKBKB, TNFSF14, TRAF3, LTA, TRIM25, PRKCO, TRAF1, LTB, MAP3K14, CARD11, TNFRSF1A]
Apoptosis	[NTRK1, GZMB, FASLG, TRAF1, TNFRSF1A, ERN1, IKBKB, AKT3, LMNA, CAPN2, TNFSF10, MAP3K14, CTSC, MAP3K5]
Type I diabetes mellitus	[CD86, IFNG, ICA1, LTA, GZMB, FASLG, IL2]
Th1 and Th2 cell differentiation	[IKBKB, PPP3CA, IFNG, STAT4, PRKCO, MAML3, RBPJ, IL12RB1, IL2, MAPK13]
Lipid and atherosclerosis	[LYN, VAV3, CAMK2D, FASLG, TANK, TNFRSF1A, MAPK13, IKBKB, ERN1, PPP3CA, TRAF3, AKT3, TNFSF10, ARHGAP1, CAMK2G, ABOG1, MAP3K5]
HIF-1 signaling pathway	[CAMK2D, EGLN3, PRKFB3, IFNG, MKNK1, AKT3, SLC2A1, IGF1, CAMK2G, HK2, EGFR]

Figure S3**A**TH17 IL-10 **Positive vs Negative**
signature at **Day 0** from GSE101389TH17 IL-10 **Negative vs Positive**
signature at **Day 0** from GSE101389

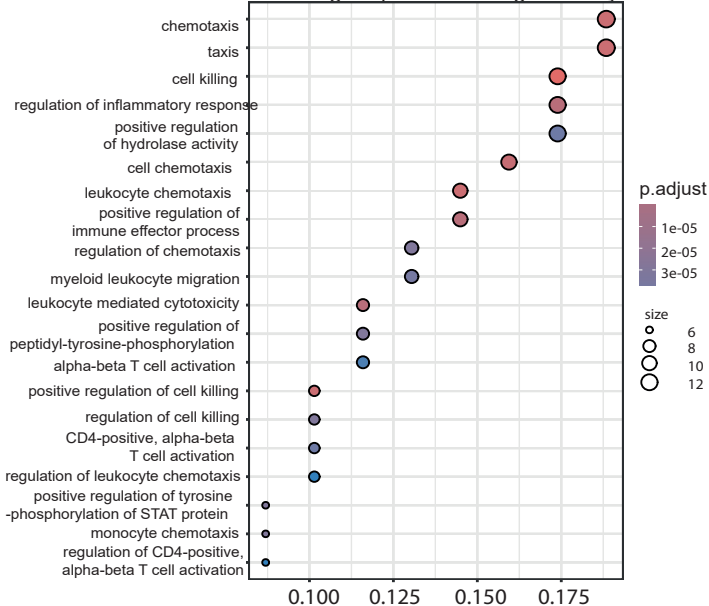
Rank
upregulated TH17-IL-22⁺/IFN γ ⁺ upregulated TH17-IL-10⁺

BTH17 IL-10 **Positive vs Negative**
signature at **Day 5** from GSE101389TH17 IL-10 **Negative vs Positive**
signature at **Day 5** from GSE101389

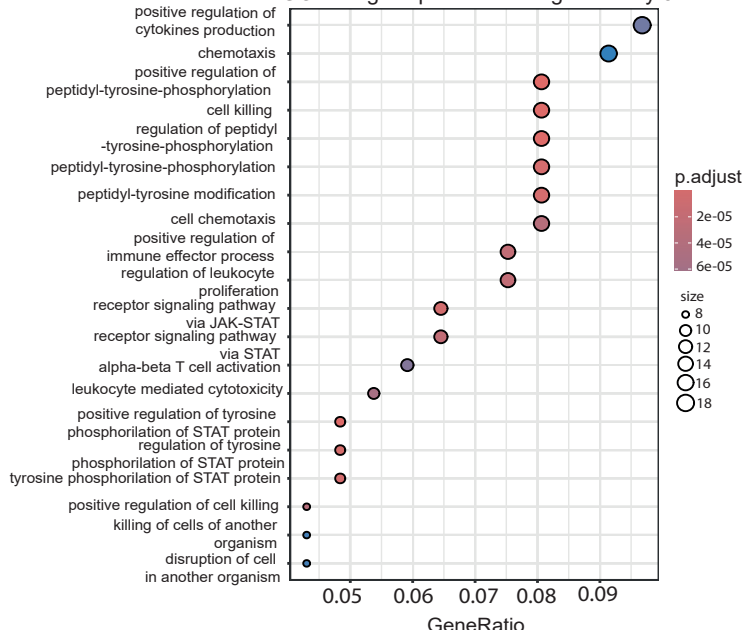
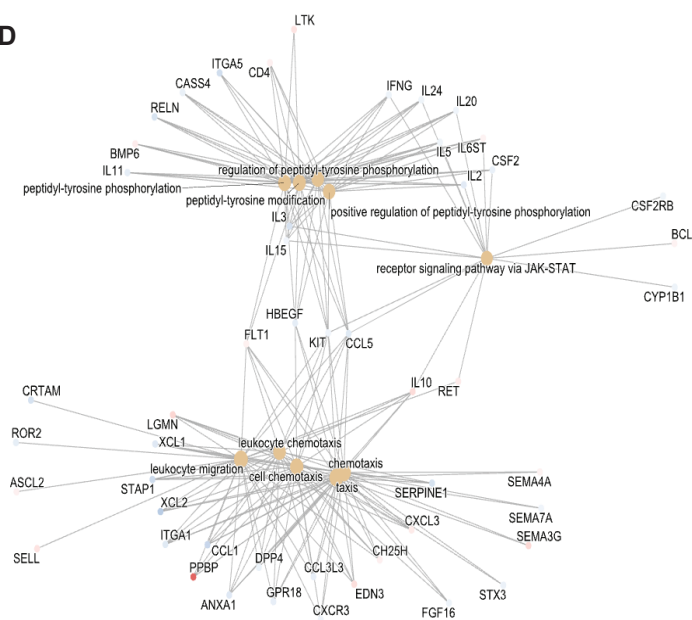
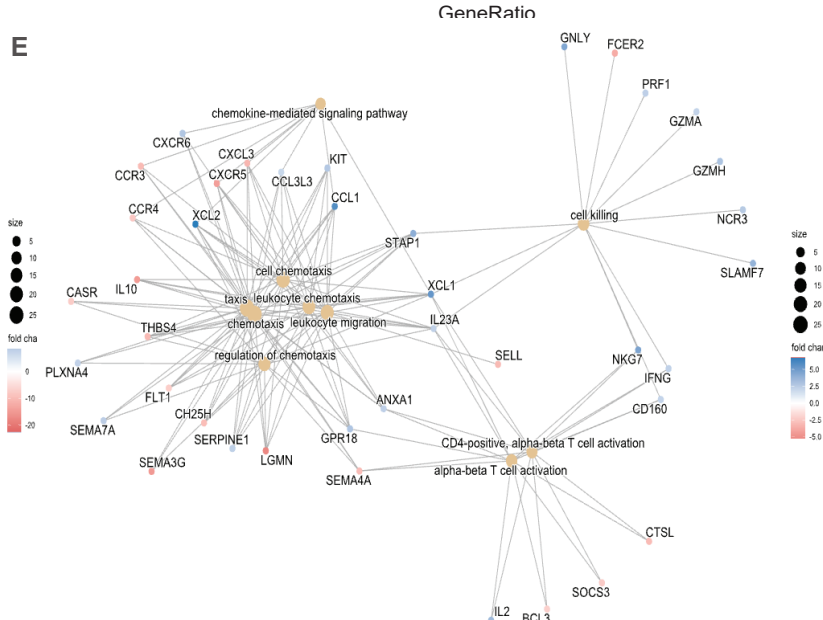
Rank
upregulated TH17-IL-22⁺/IFN γ ⁺ upregulated TH17-IL-10⁺

C

GO biological process - DE genes Day 0

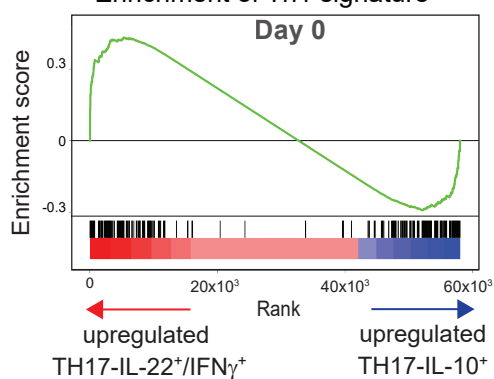


GO biological process - DE genes Day 5

**D****E****F**

Enrichment of Th1 signature

Day 0



Enrichment of Th1 signature

Day 5

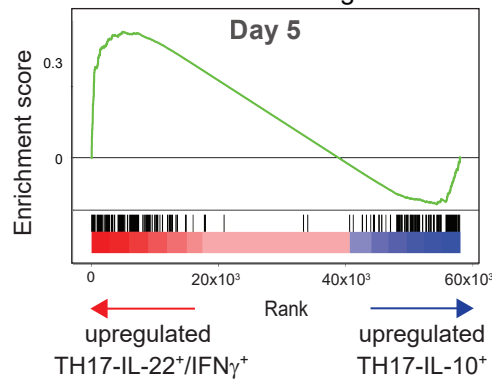


Figure S4

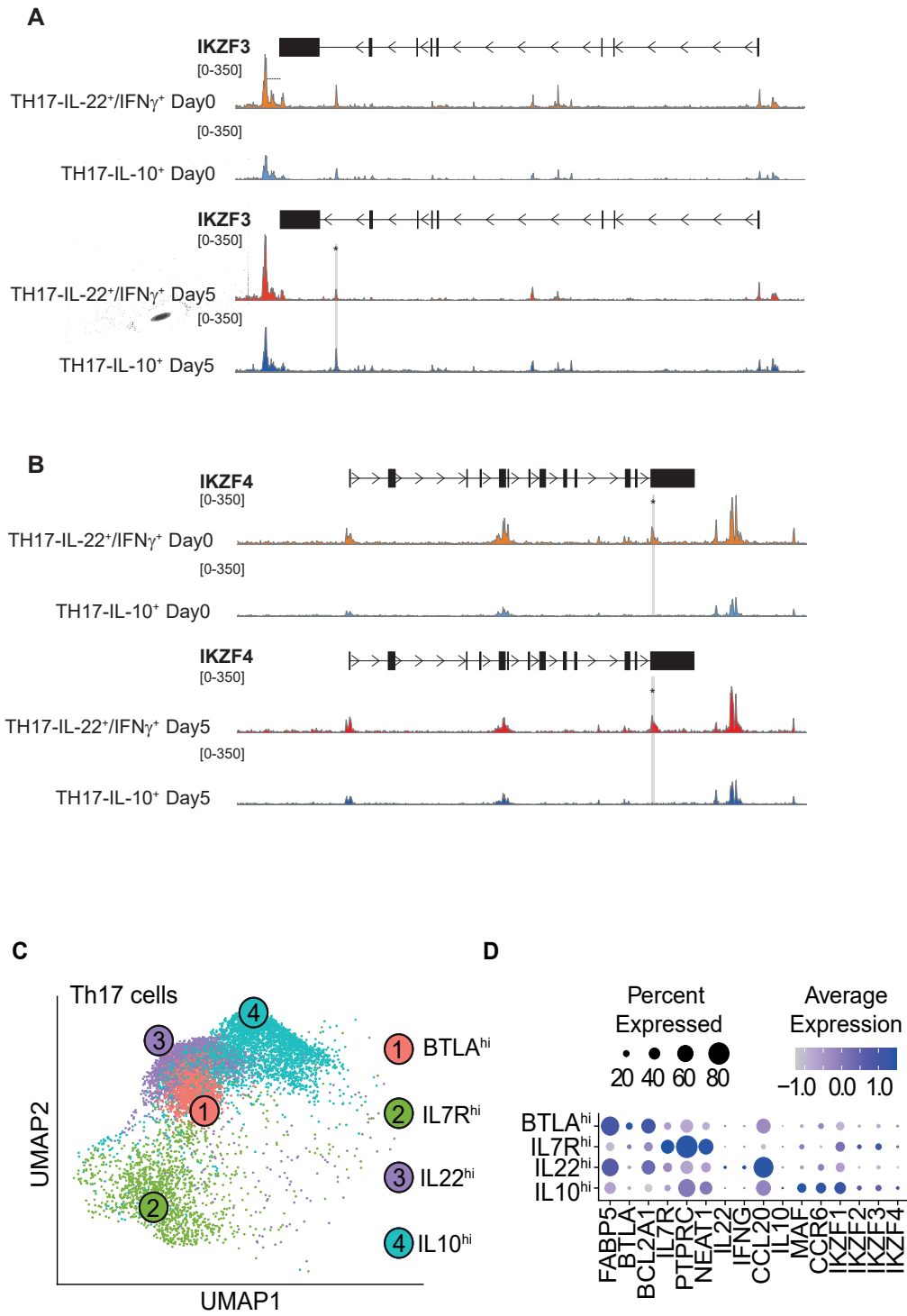


Figure S5

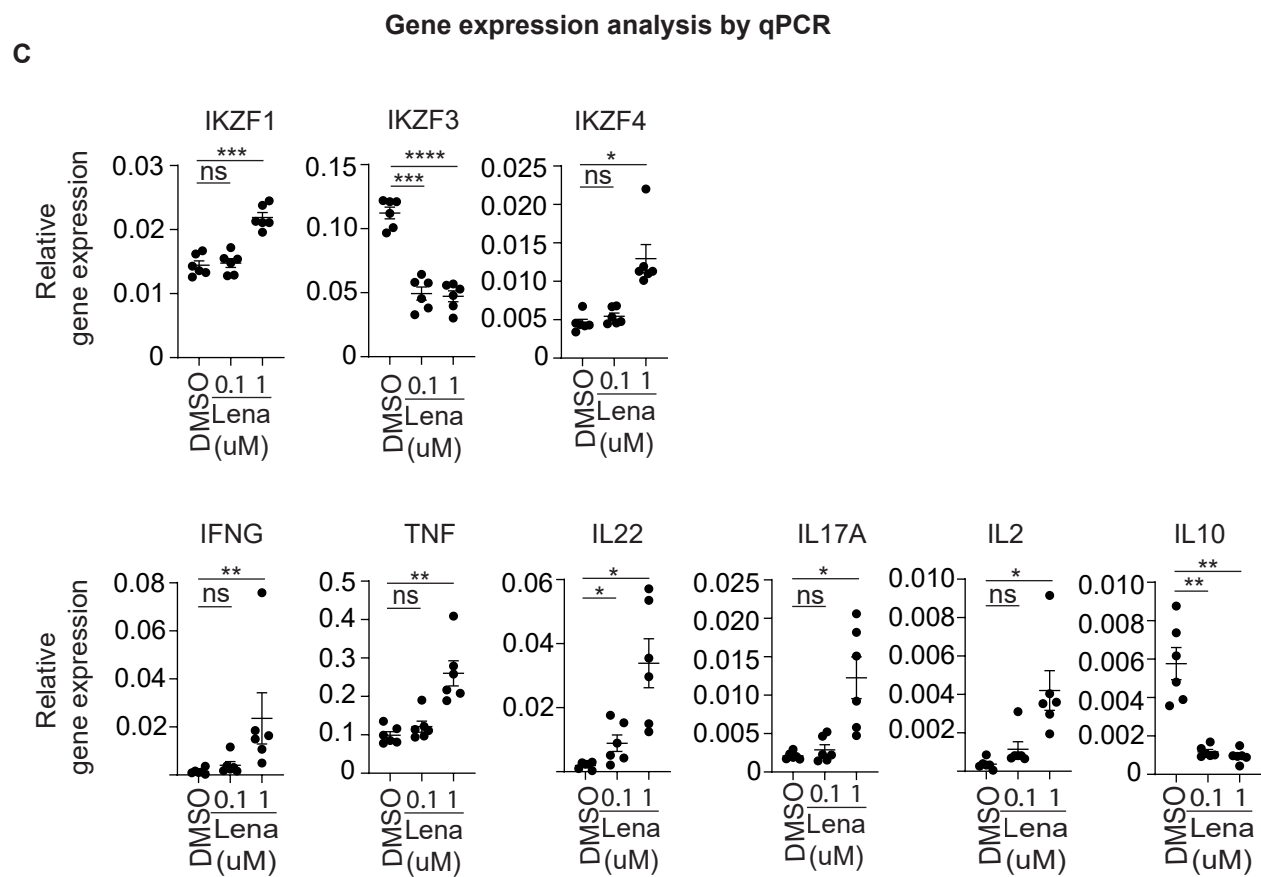
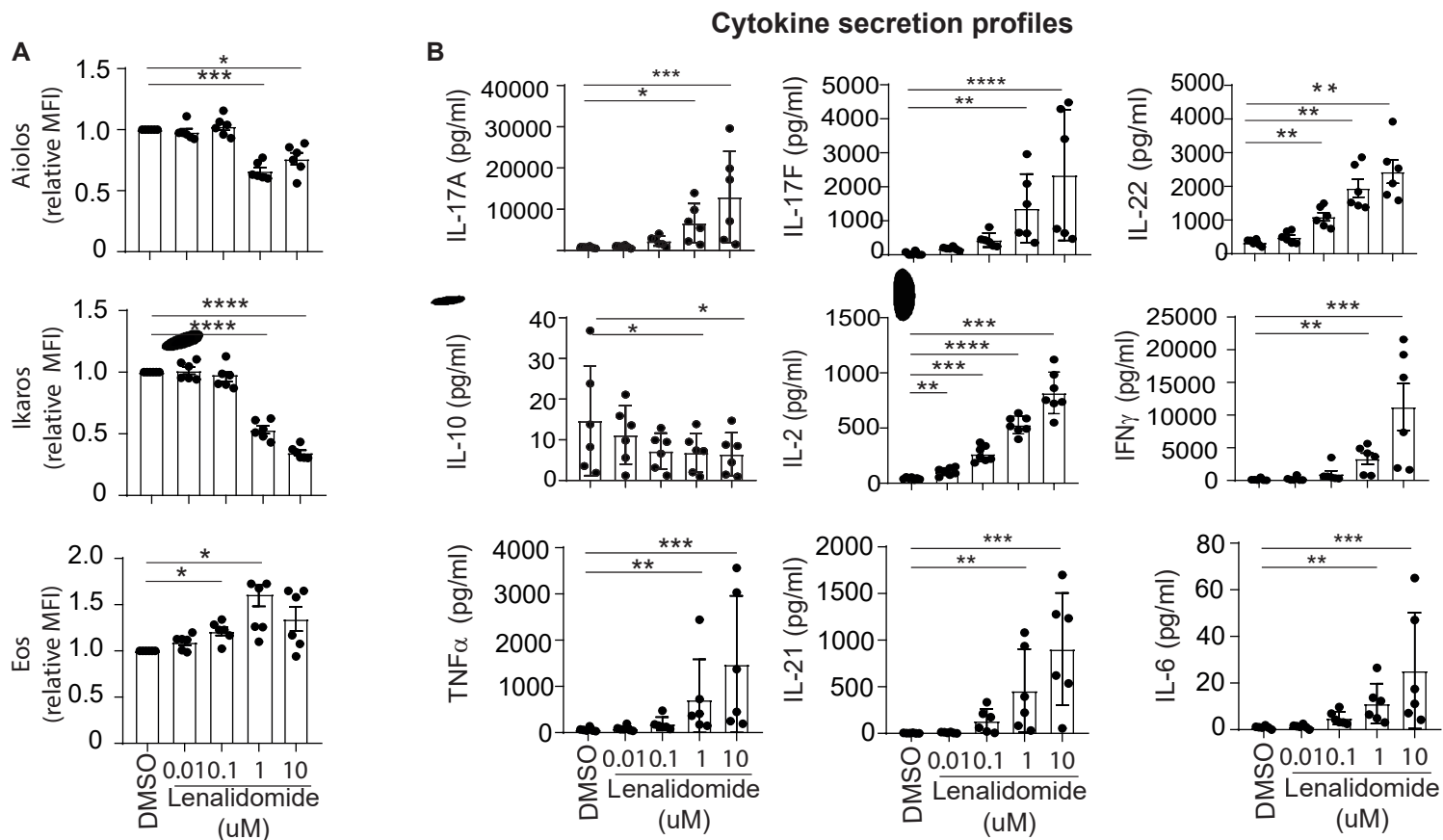
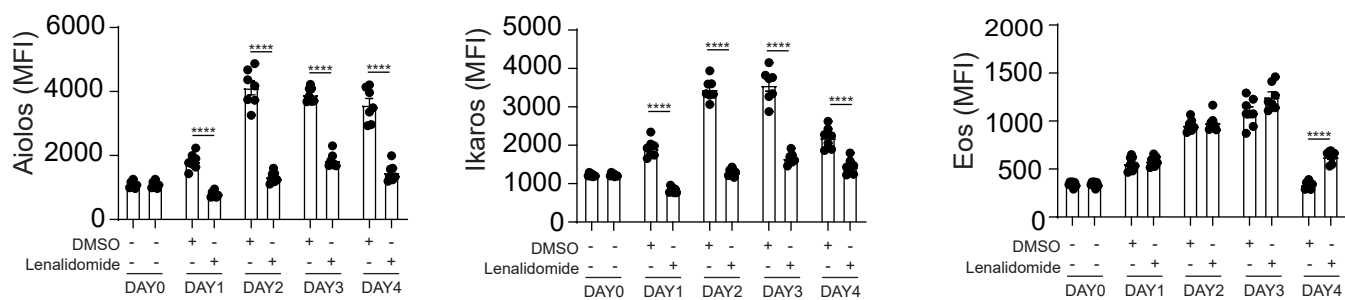
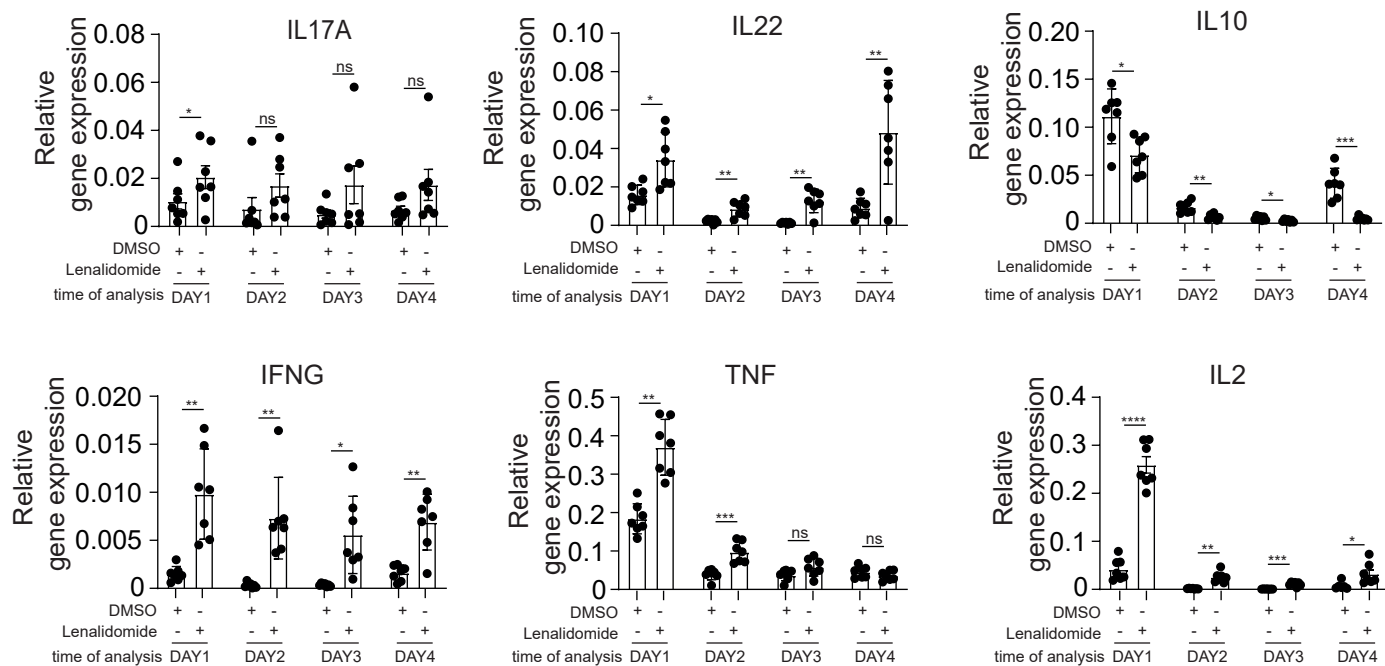


Figure S6

A

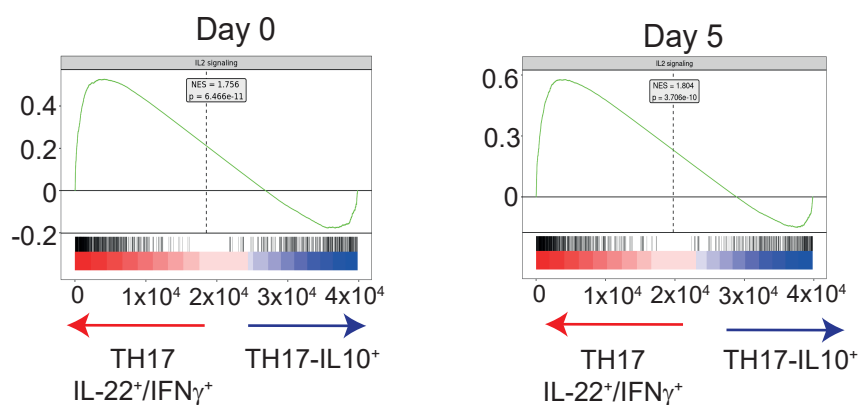


B



C

IL-2-induced gene signature



D

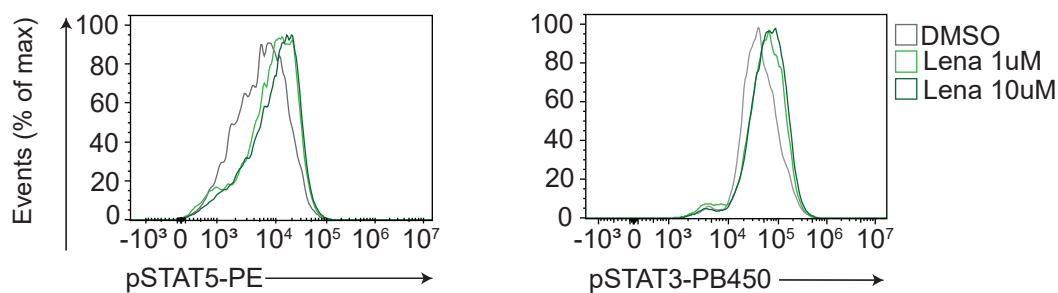


Figure S7

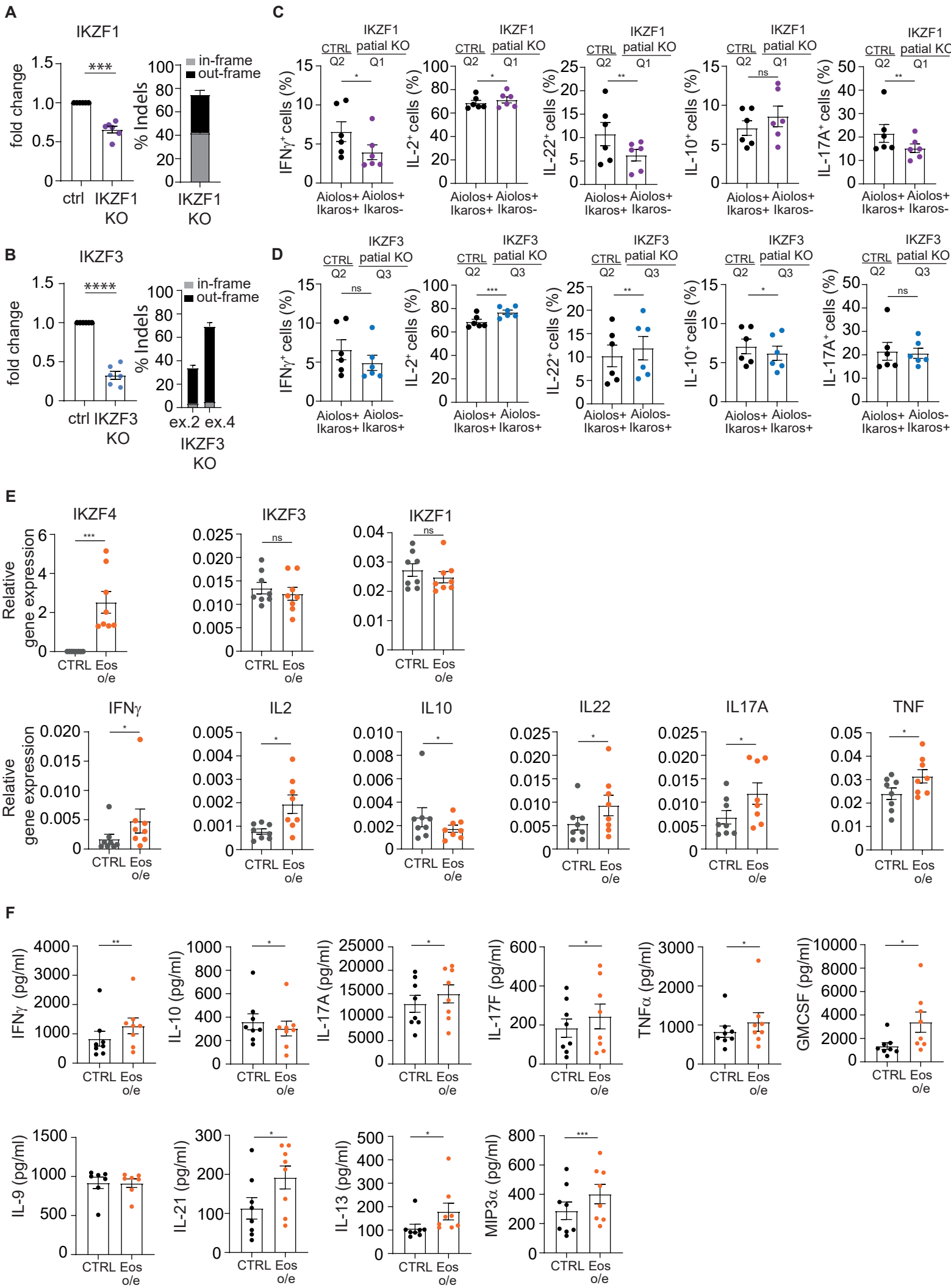
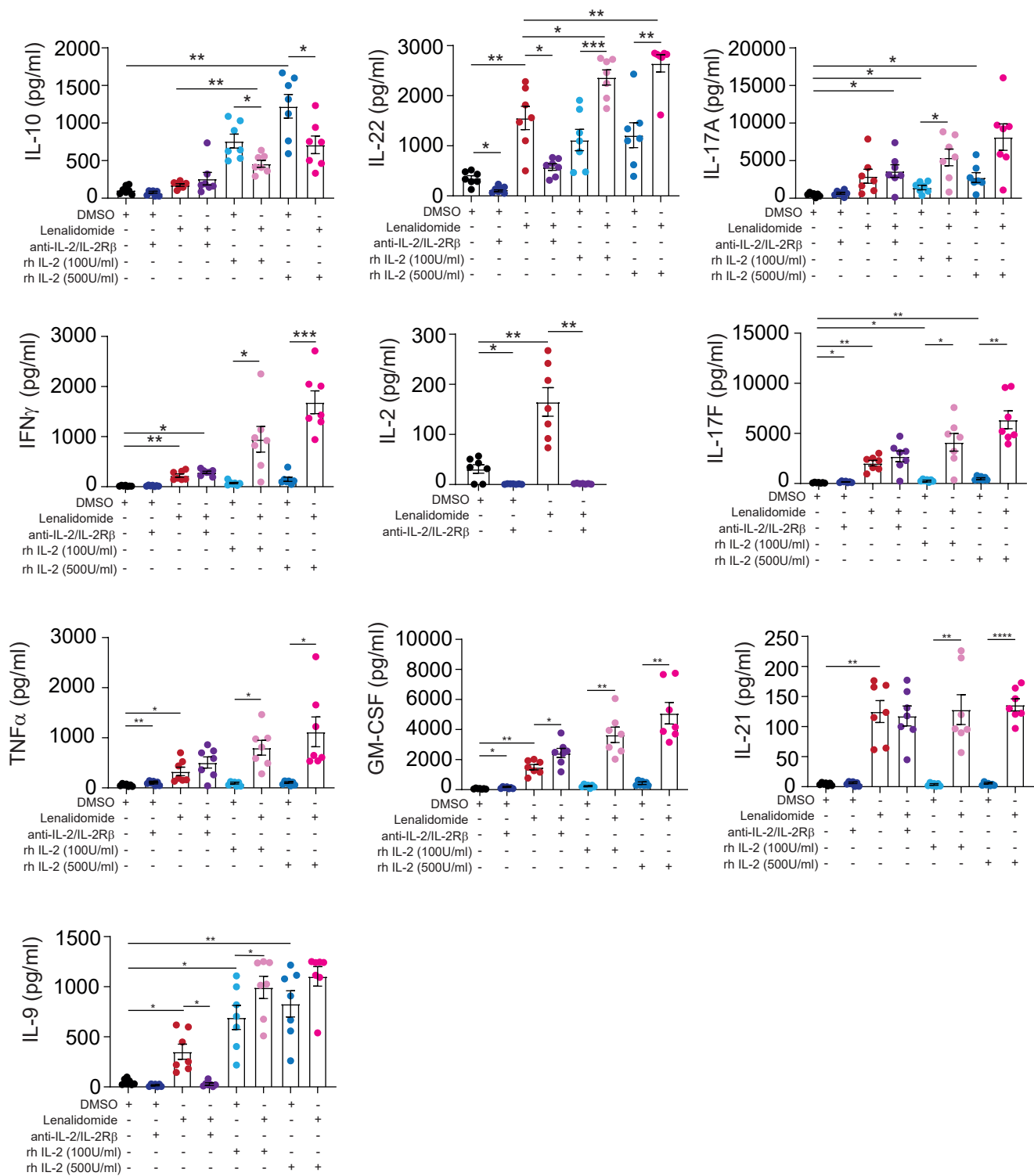


Figure S8

A



B

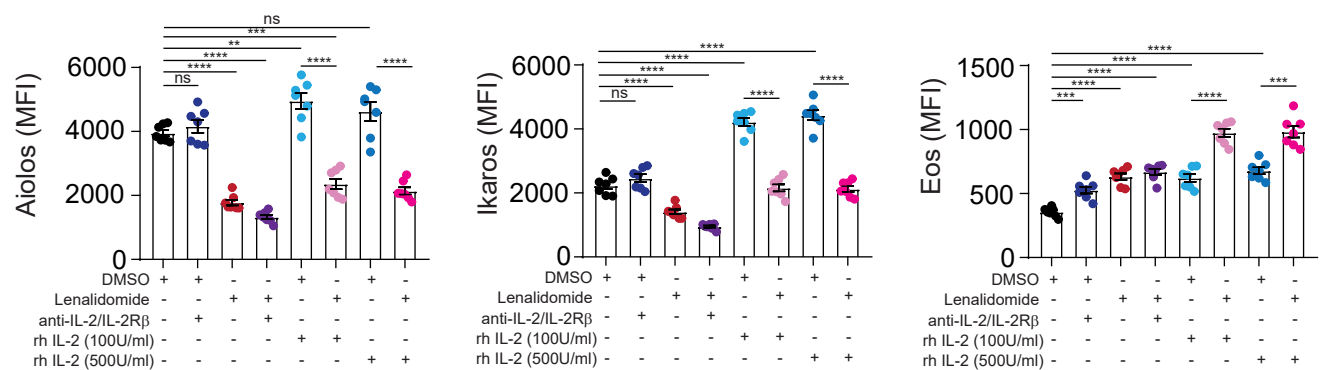
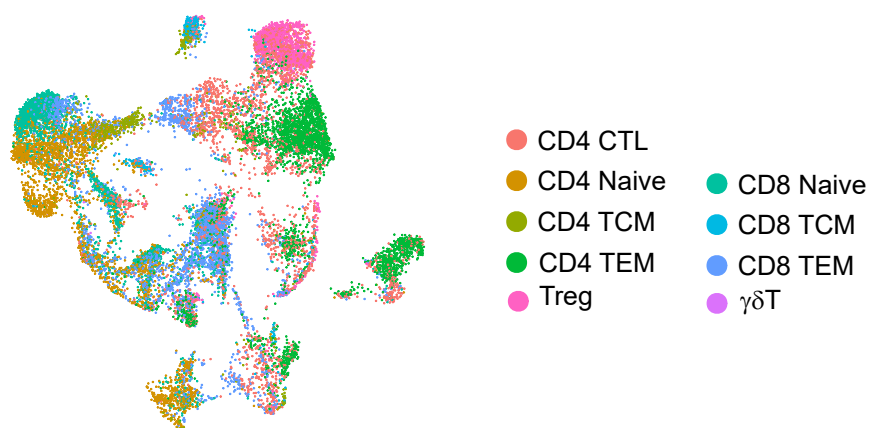


Figure S9

A predicted cell type



B

Sorted CD4⁺ T-cells

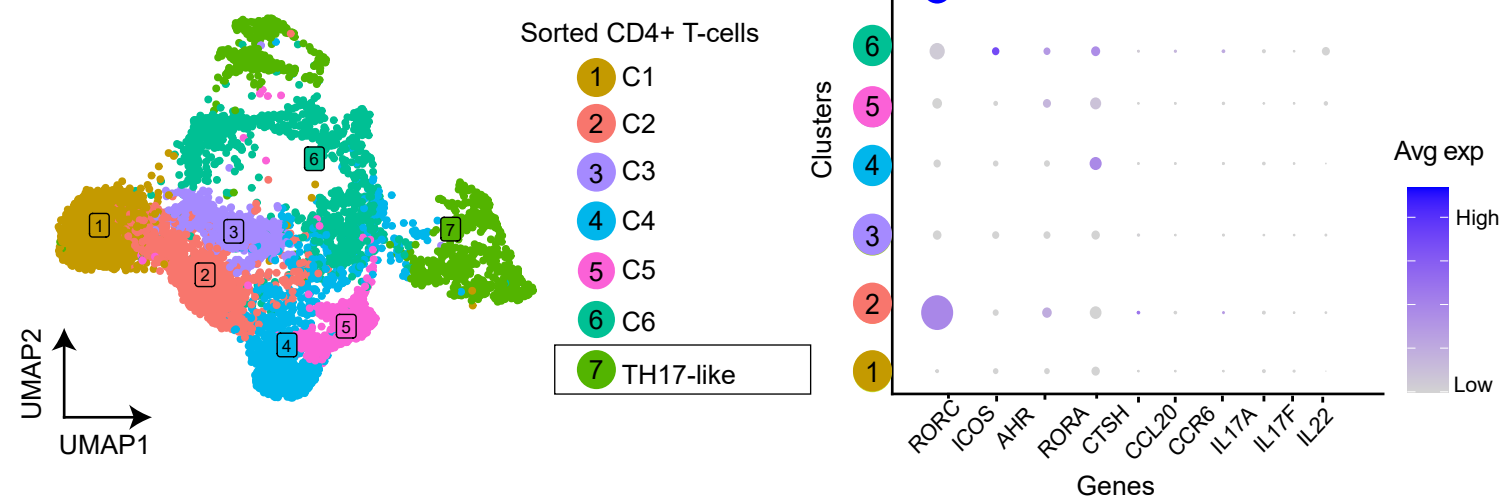
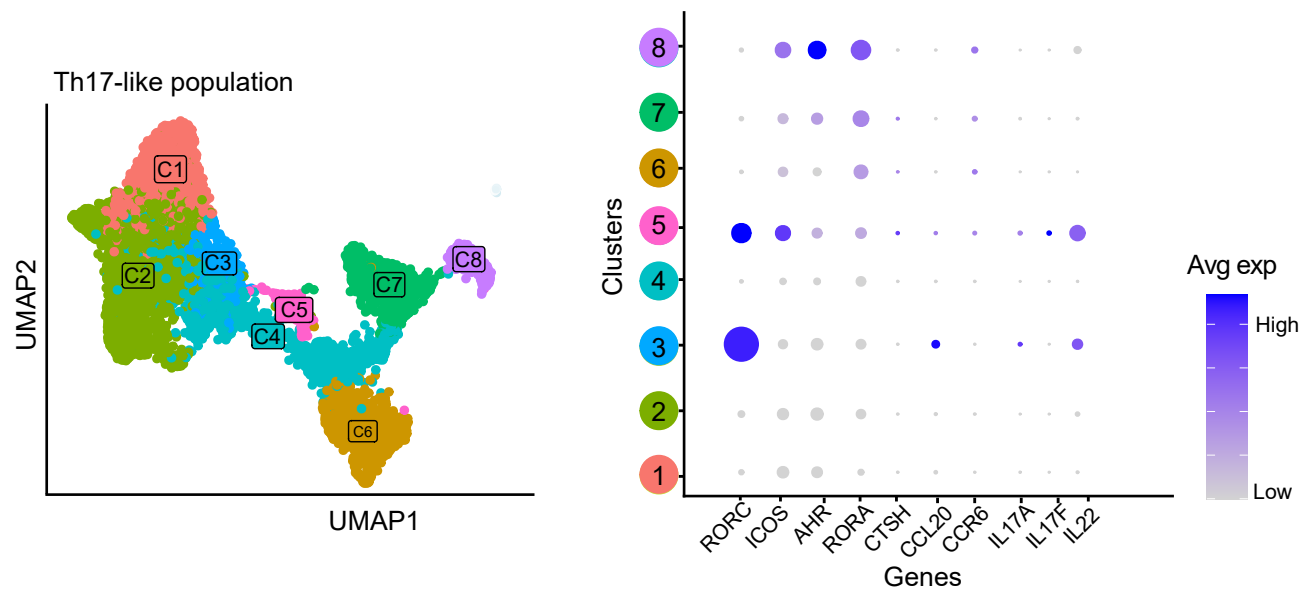
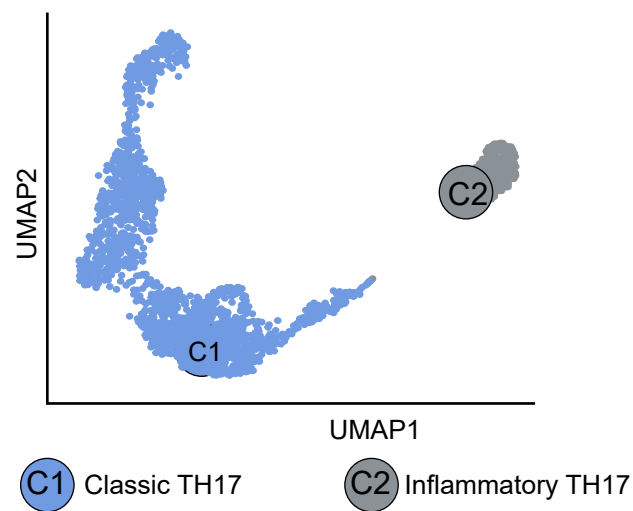


Figure S10

A



B



C

