Figure 2 **B** lymphocyte Myeloid cell T&NK Depleted in MASLD Enriched in MASLD Tnaive CD4/CD8 Circulating NKT cell Teff CD8 Resident NK cell Circulating NK cell UMAP2 Plasma IgG Plasma\_lgA UMAP1 UMAP1 UMAP1 Bnaive Bmemory Neighborhood differential abundance analysis - MASLD vs CTRL b pDC CD16+ Monocyte Neighborhood size 。 100 LAM 200 CD14+ Monocyte 0 300 cDC2 0 400 UMAP1 UMAP1 UMAP1 Log2FC Log Fold Change Enriched with Depleted in MASH Enriched in MASH MASLD progression Neighborhood differential abundance analysis - MASH vs MASL Depleted with MASLD progression Circulating NKT cell Circulating NK cell Overlap size Tnaive\_CD4/CD8 50 Teff\_CD8 **—** 100 \_\_\_ 200 MAIT Resident NK cell Plasma\_lgG UMAP1 UMAP1 UMAP1 Bmemory Plasma\_lgA Bnaive pDC Circulating NKT cell
MAIT CD16+ Monocyte MASL
MASH • Teff\_CD8 CD14+ Monocyte Tnaive\_CD4/CD8Treg cDC2 Number of cells  $\cdot \circ \bigcirc$ 1 25 50 100

Log Fold Change