



**Supplementary Figure S4. Characterization of the cells in the scRNA-sequenced ovarian ascites MoMac cluster, related to Fig. 1E.**

**A - C**, Myeloid-derived suppressor cell (MDSC) marker gene expression in the scRNA-sequenced ovarian ascites cells ( $n = 7$  patients). As MoMac cluster (Fig. 1E) was the only cluster expressing *ITGAM* (*CD11b*) (A), we clustered these cells (excluding mo-DCs identified in Supplementary Fig. S3) into 12 subclusters (B) to evaluate the expression of known granulocyte-like (PMN-MDSC) and monocyte-like (M-MDSC) MDSC markers (18, 19) (C). We did not identify any clusters corresponding to PMN-MDSC ( $ITGAM^+FUT4^+CEACAM8^+HLA-DRA^{low}CD14^+OLR1^+$ ) or M-MDSC ( $ITGAM^+CD14^+CD33^+HLA-DRA^{low}FUT4^-$ ). **D** and **E**, Mapping of monocytes and macrophages to MoMac-VERSE (Mulder *et al.*) is shown separately for NoR ( $n = 3$ ) and R ( $n = 4$ ) patient samples, related to Fig. 1G and H. MoMac-VERSE UMAP plots of mapped IgG4- and bexmarilimab-treated cells (**D**) and proportions of cells mapped to each MoMac-VERSE cluster (**E**). **F**, UMAP plot of all ovarian ascites cells colored by *CXCL10* expression. BEX, bexmarilimab; IgG4, isotype control for bexmarilimab; NoR, bexmarilimab non-responsive; R, bexmarilimab responsive.