

Supplementary File for

Single cell analysis of epithelial, immune, and stromal signatures and interactions in human ovarian cancer

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This file contains Supplementary Figure S1-S4:

Figure S1:

- A. The UMAP plot is separated by patient samples, with colors indicate different clusters
- B. The UMAP plot color coded for the expression of marker genes for major cell type.

Figure S2:

- A. The curve chart shows the stability and error of different quantity of gene module.
- B. The UMAP plot shows different stages of the epithelial cell by color.
- C. The UMAP plot shows different tissues of the epithelial cell by color.

- D. Stacked bar graph of the proportion of epithelial cell cluster in each stage(top) and the proportion of stage (middle) and tissue (bottom) in each epithelial cell sub cluster.
- E. The UMAP plot shows CNV score of the epithelial cell by color.
- F. Heat maps show the GSVA scores of cancer-related function gene sets for each gene module(top) and the GO enrichment terms of the top 200 contribution genes of each gene module(bottom).
- G. Clustering analysis based on similar temporal patterns of high variation genes in epithelial cells.

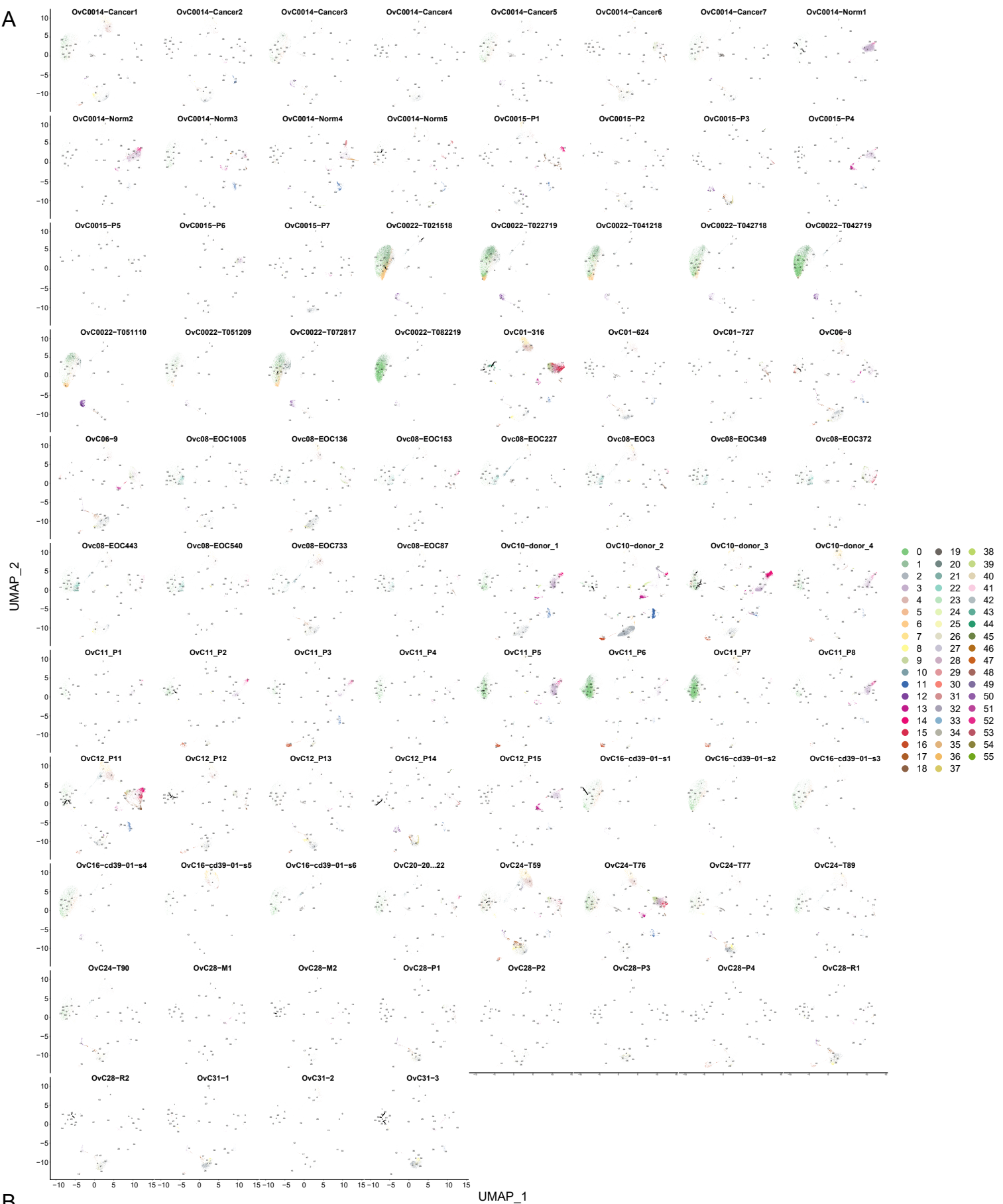
Figure S3:

- A. The donut diagram shows the different tissue, stage, source, patient sample composition of the T cell.
- B. The box plot shows change of Treg differentiation score in T cell with stage.
- C. The box plot shows change of exhaustion differentiation score in T cell with stage. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$, ****, $P < 0.0001$.
- D. Clustering analysis based on similar temporal patterns of high variation genes in T cells.
- E. The radar map shows changes in the proportion of T cell subtypes in ovarium, omentum, peritoneum versus normal tissue. The red dashed box indicates a significant increase from stage IC1 to stage IC2, and the blue dashed box indicates a decrease.

Figure S4:

- A. Stacked bar graph of the proportion of fibroblast sub cell types in each tissue.
- B. Stacked bar graph of the proportion of fibroblast sub cell types in each stage.

A



B

