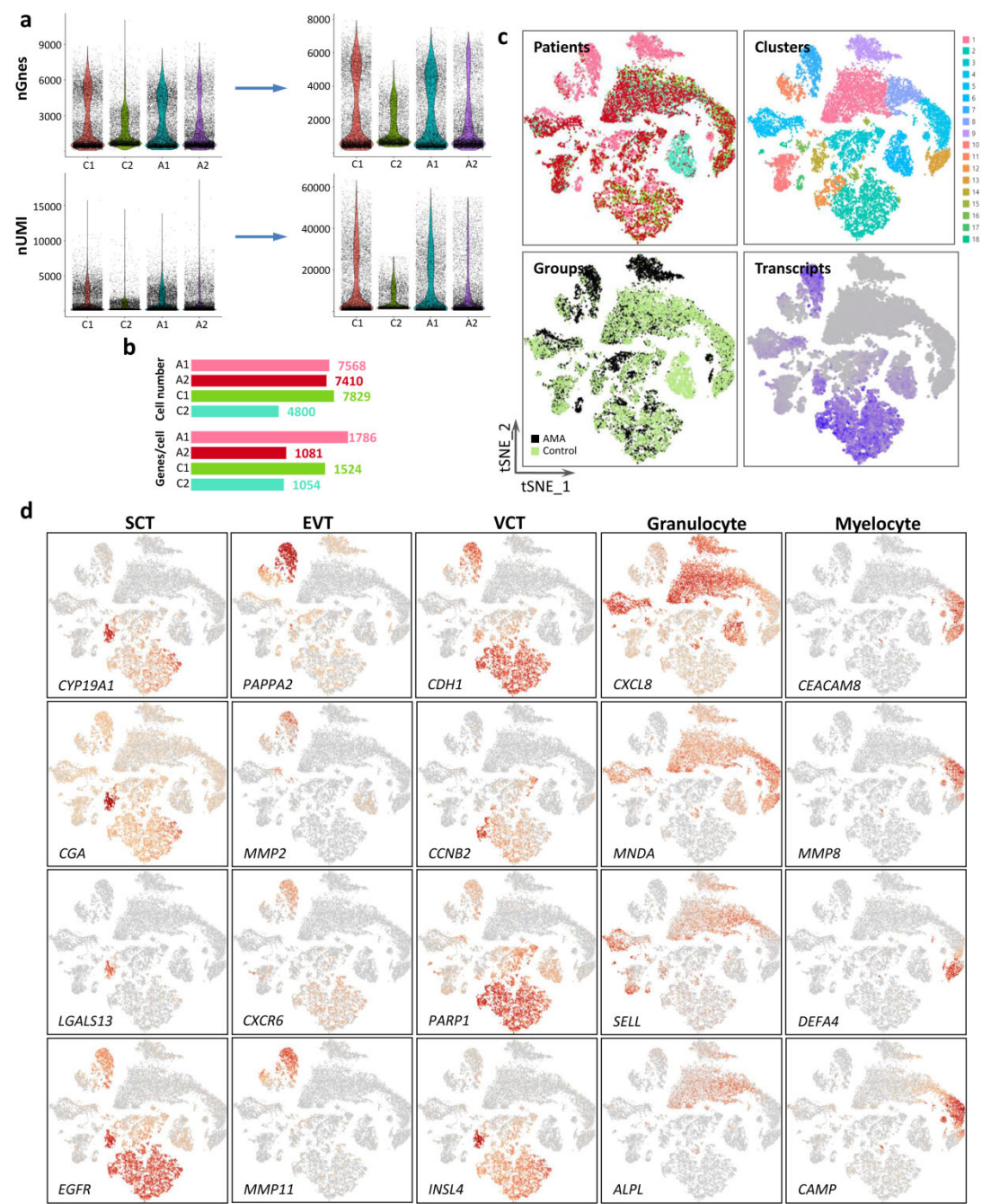
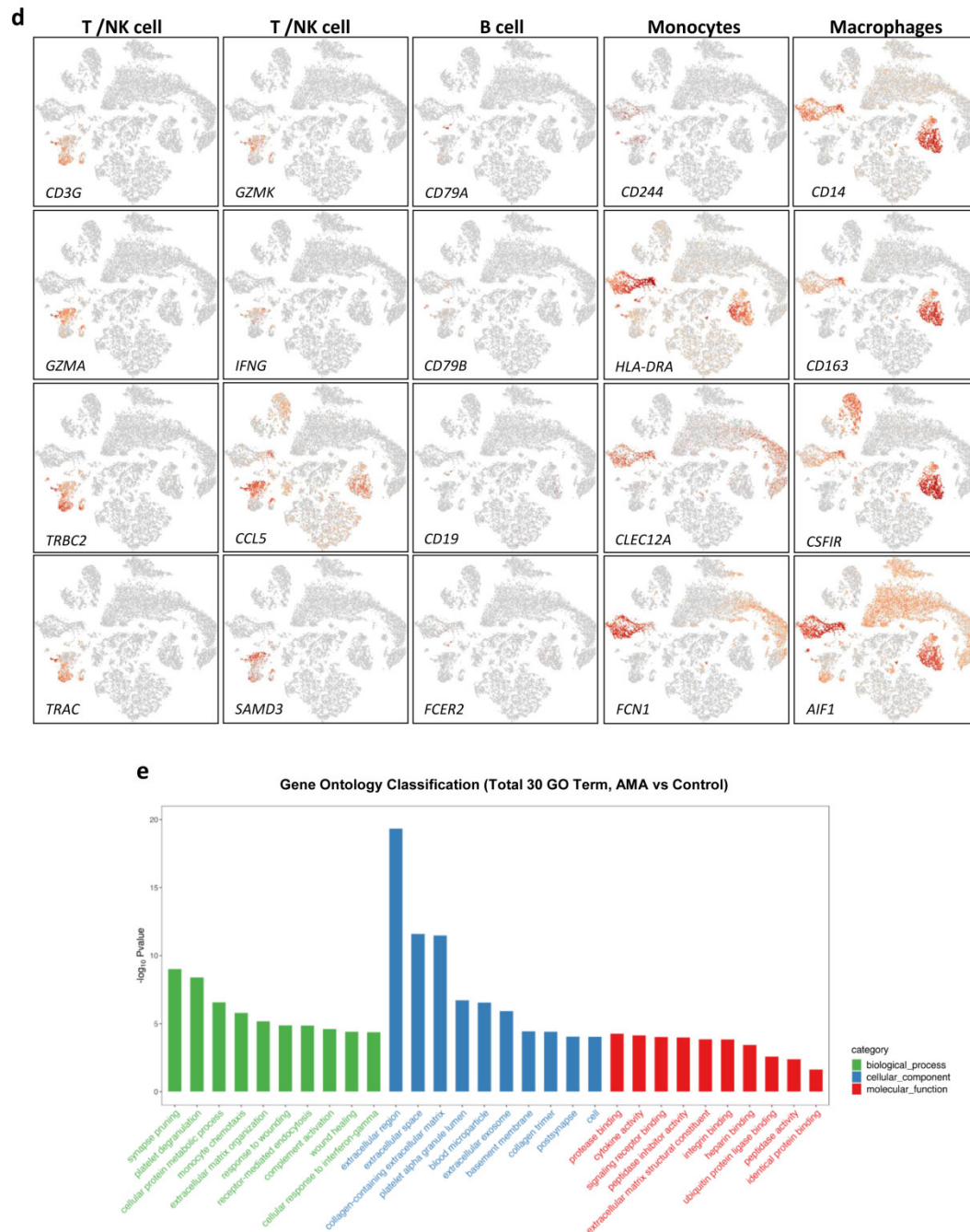


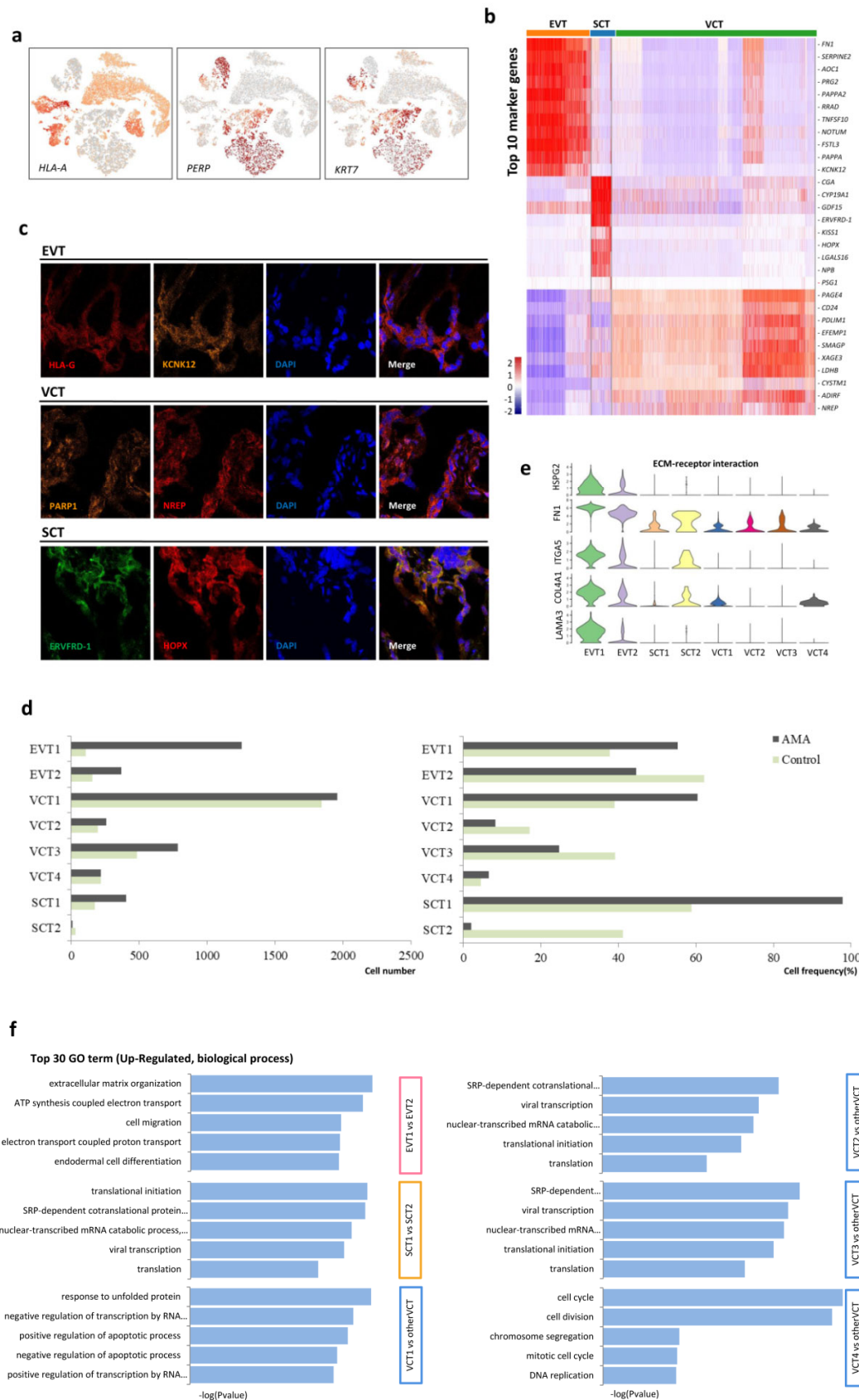
# Reduced cell invasion may be a characteristic of placental defects in pregnant women of advanced maternal age at single-cell level

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**Fig. S1** (a) Quantitative quality control of scRNA-seq. (b) Comparison of cell numbers within different groups. (c) t-SNE plot of the 27,607 cells profiled. They are coded with different colors according to different patients, groups, and cell clusters. (d) Expression of marker genes used to identify the nine cell types. (e) GO analysis based on the DEGs. scRNA-seq, single-cell ribonucleic acid sequencing; t-SNE, t-distributed stochastic neighbor embedding; GO, gene ontology; DEG, differentially expressed gene; KEGG, Kyoto Encyclopedia of Genes and Genomes.



**Comparison of trophoblast subtypes (AMA vs. control). (e) Violin plots of DEGs enriched in ECM-receptor interaction in EVT. (f) Comparison of the biological processes of eight trophoblast cell subtypes by GO analysis. VCT, villous cytotrophoblast; EVT, extravillous trophoblast; SCT, syncytiotrophoblast; ECM, extracellular matrix; DEG, differentially expressed gene; GO, gene ontology.**