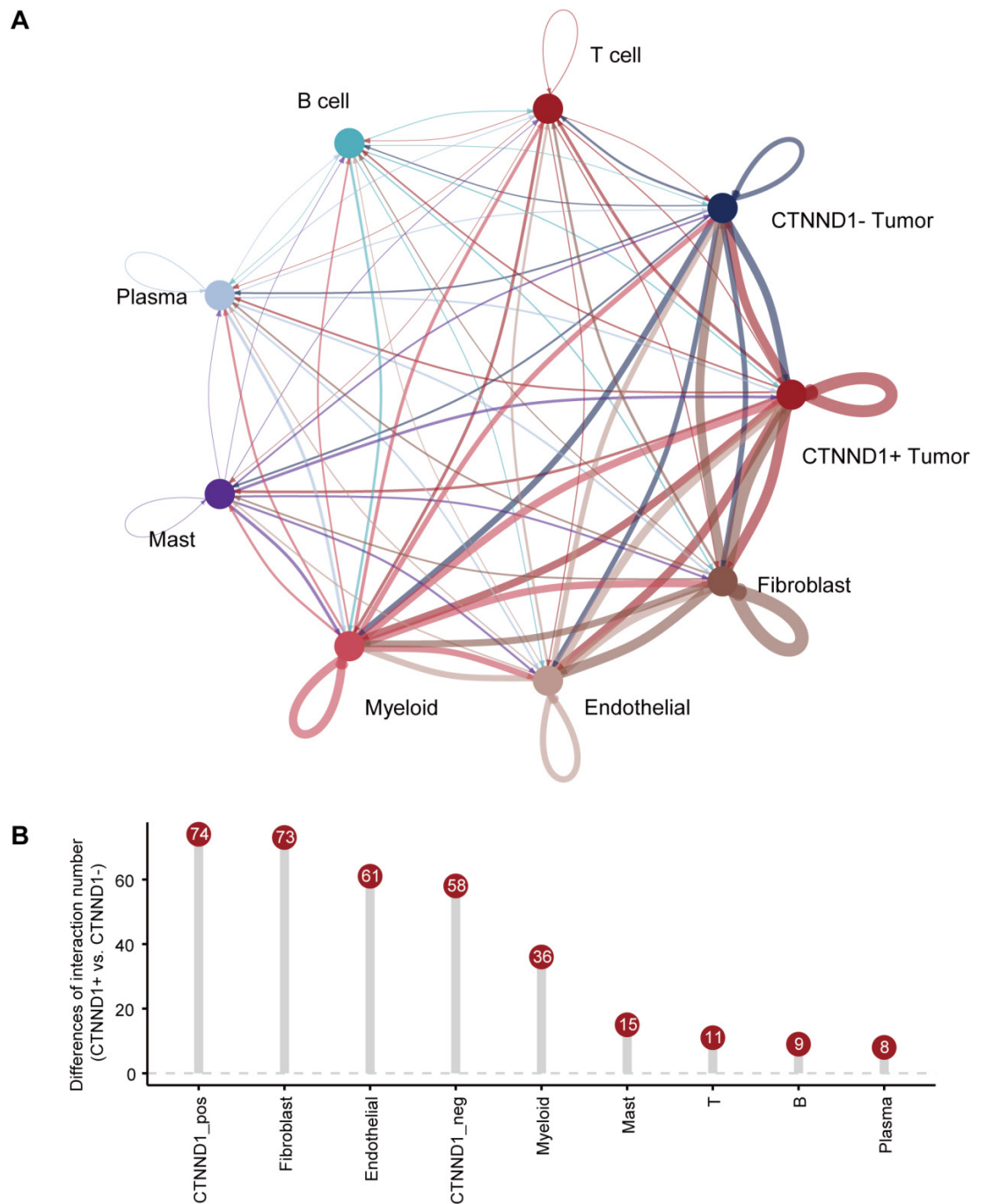


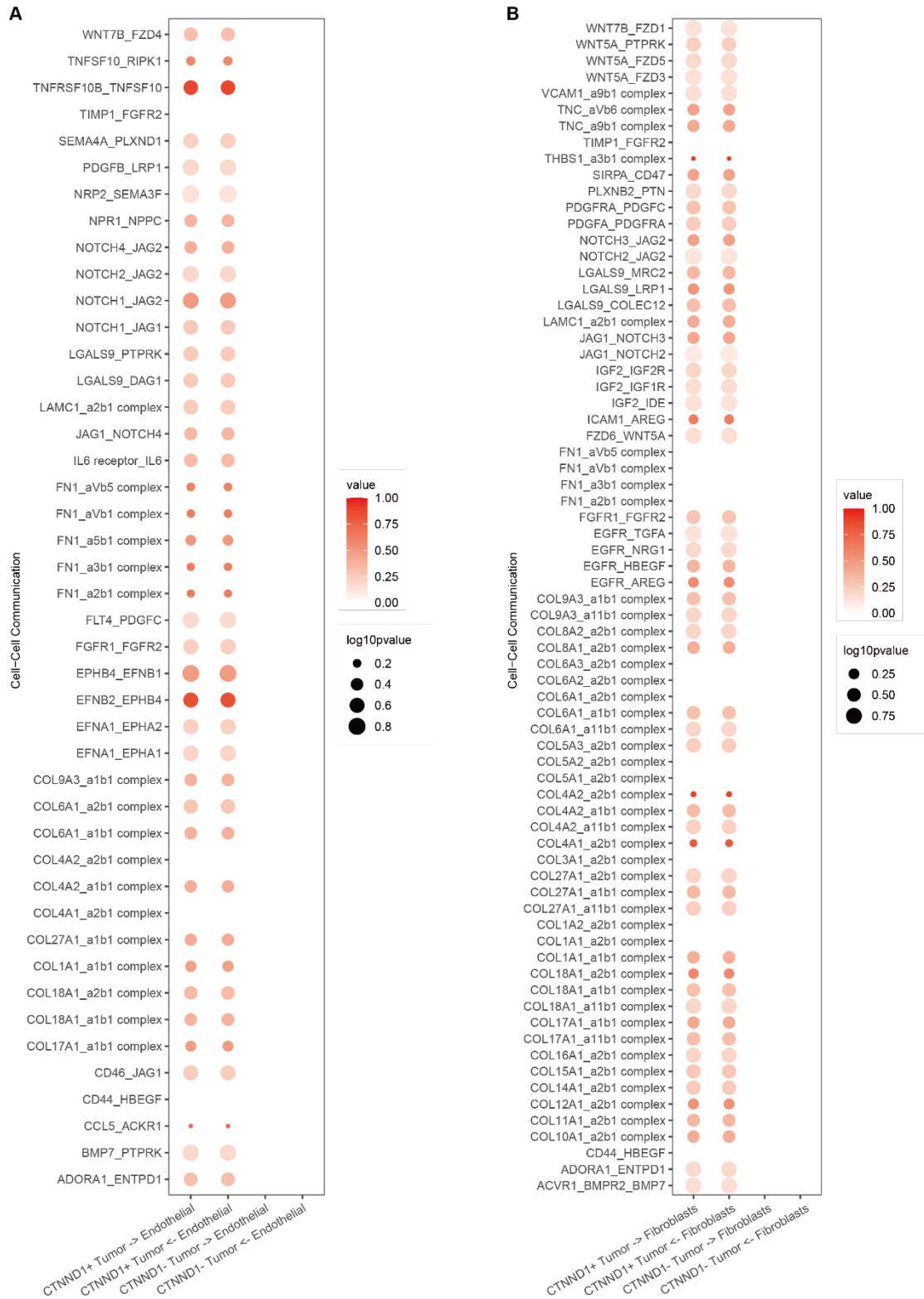
Supplementary Figure 1. Unsupervised clustering of the 11 NSCLC patients from the GSE131907 dataset.

(A) t-SNE visualization of single cells passed quality controls, colored by 11 NSCLC patients. (B) The unsupervised clustering of cells in the GSE131907 dataset.

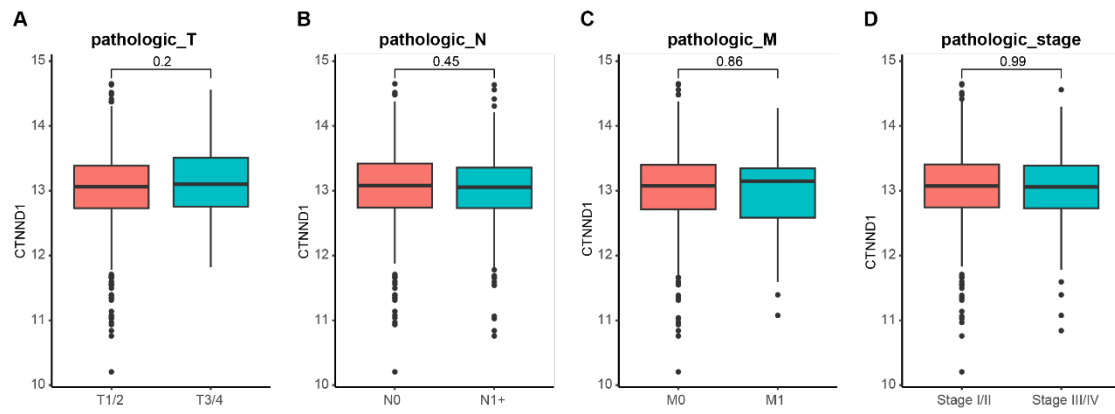


Supplementary Figure 2. Cell-cell communications between CTNND1 \pm tumor cells and microenvironment subpopulations in the GSE131907 dataset.

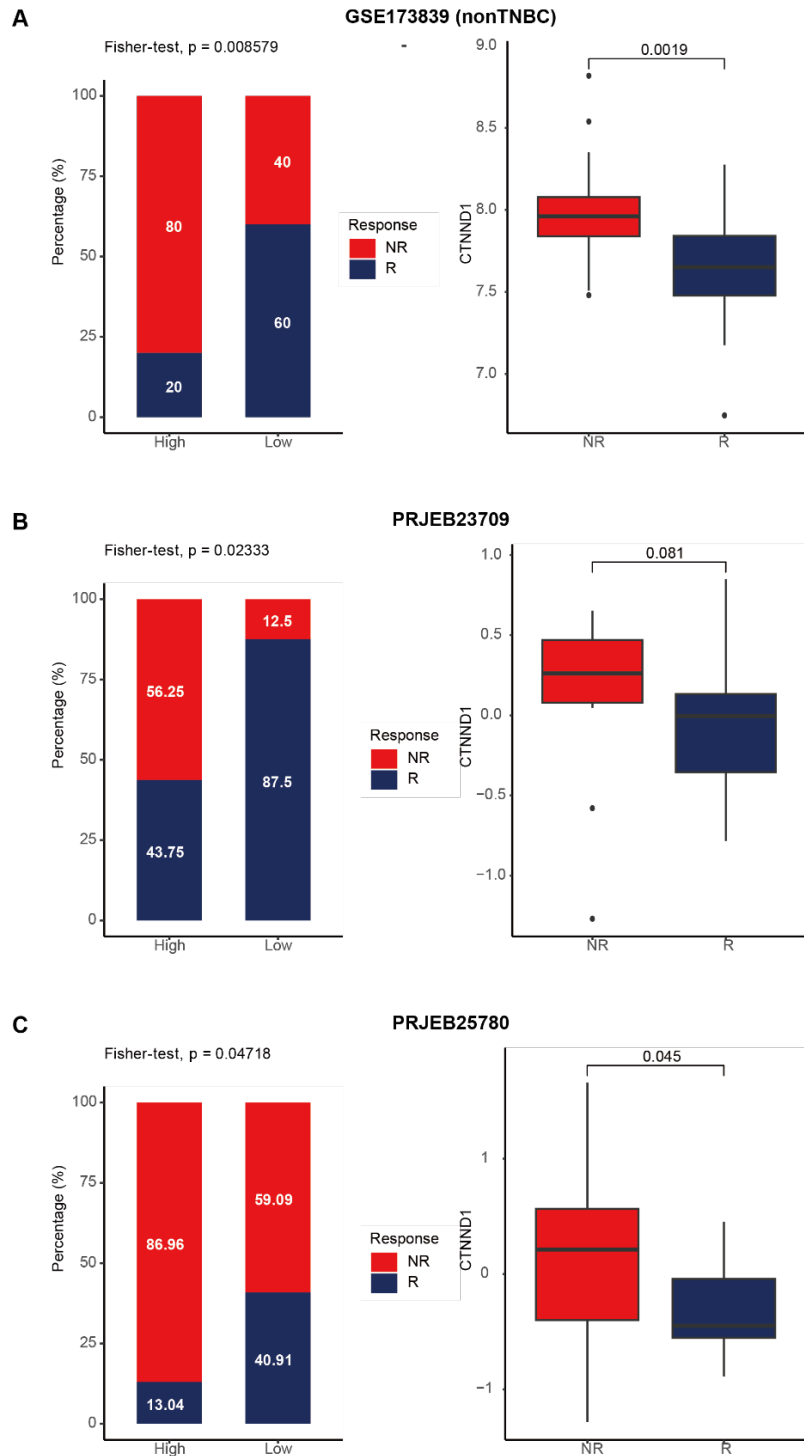
(A) The interaction number of CTNND1 \pm tumor cells and microenvironment subpopulations. The thickness of the line represents the interaction number between the subpopulations estimated by CellPhoneDB. (B) The difference of the number of ligand-receptor interactions between CTNND1 $+$ and CTNND1 $-$ tumor cells.



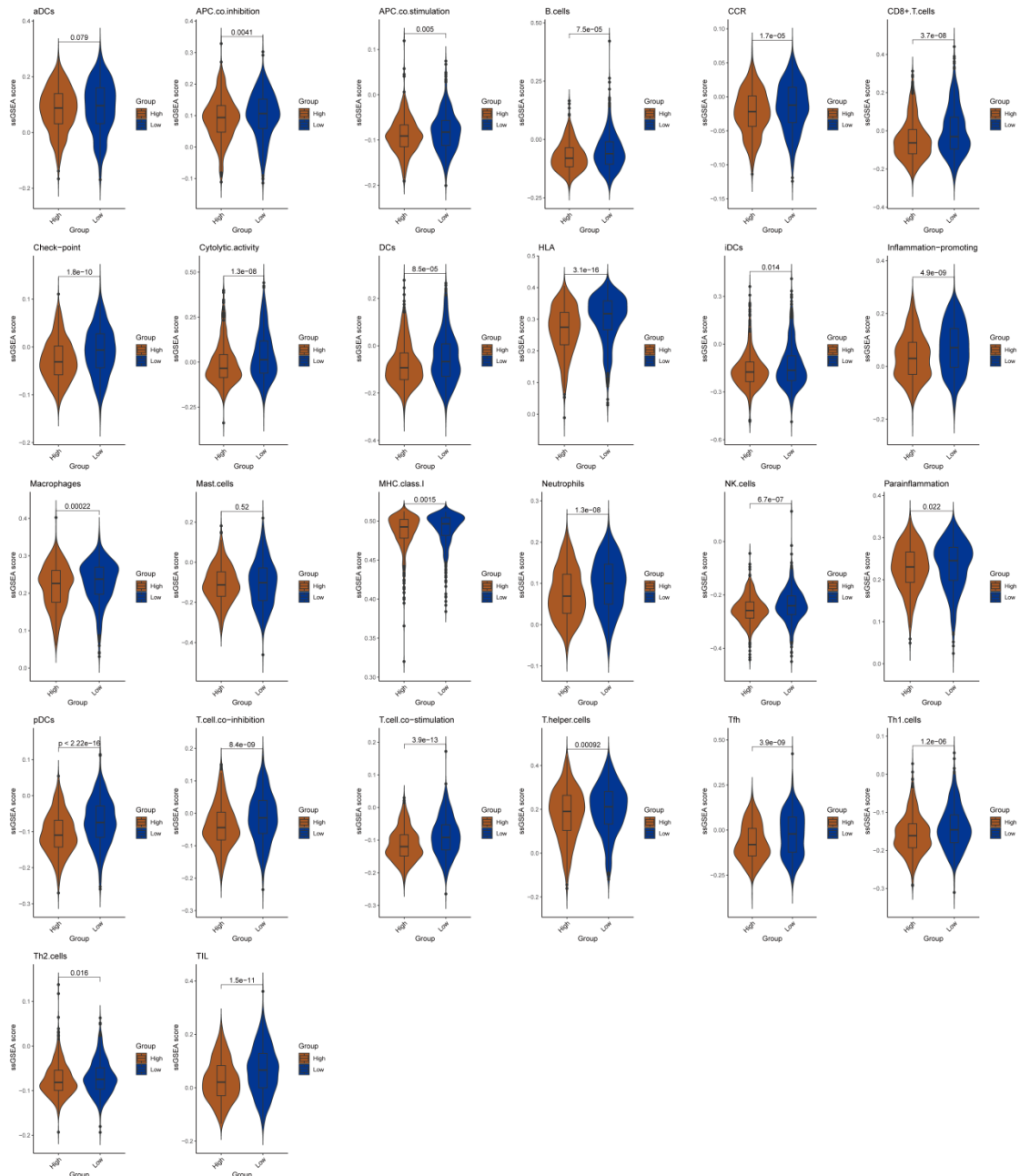
Supplementary Figure 3. Cell-cell communications between tumor and stromal cells. (A) The specific ligand-receptor interactions between tumor and endothelial cells. (B) The specific ligand-receptor interactions between tumor and fibroblasts.



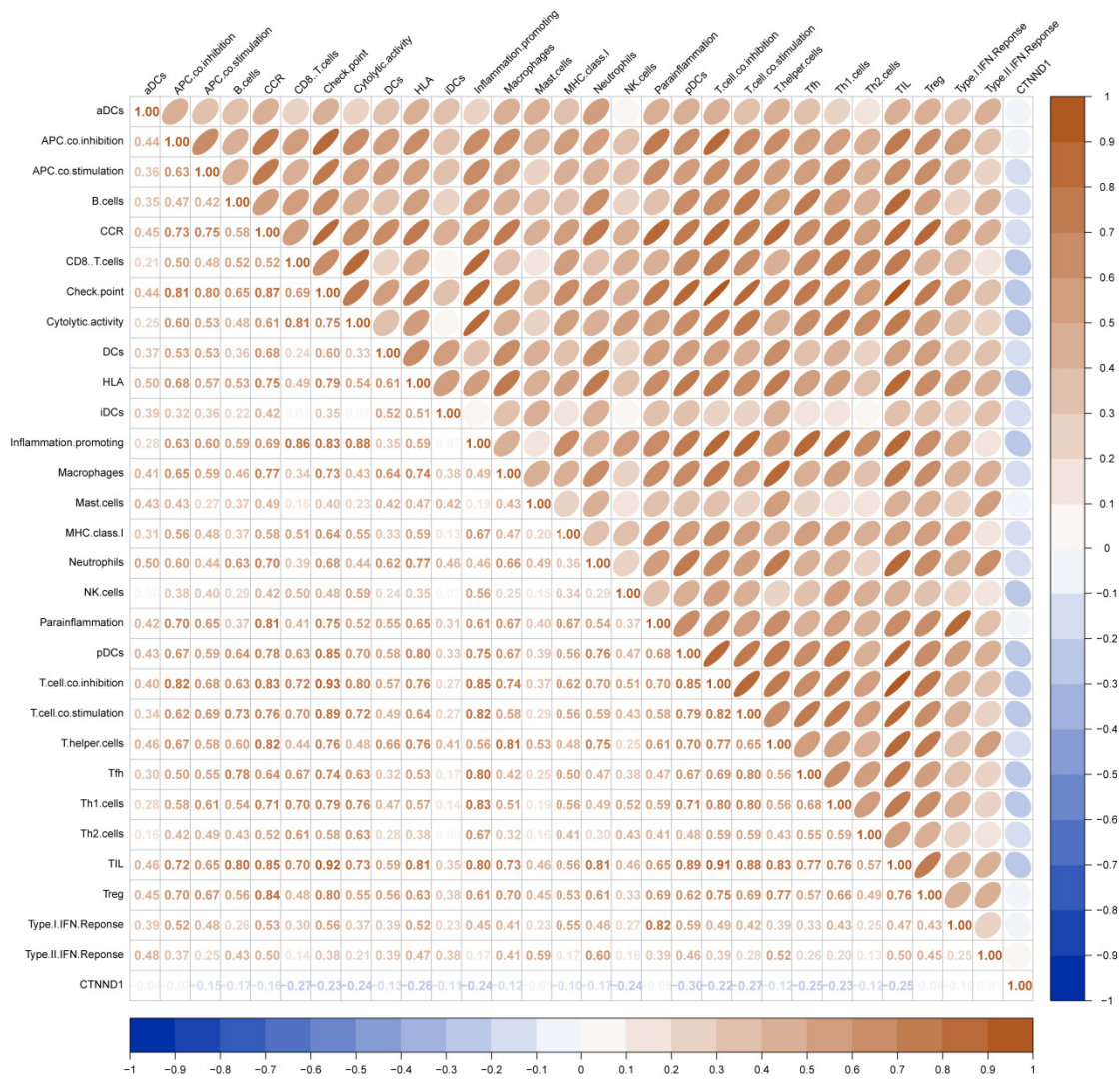
Supplementary Figure 4. Comparison of CTNND1 expression between patients with different clinic parameters. (A-D) Comparison of CTNND1 expression between patients with different T stage (A), N stage (B), M stage (C) clinical stages (D).



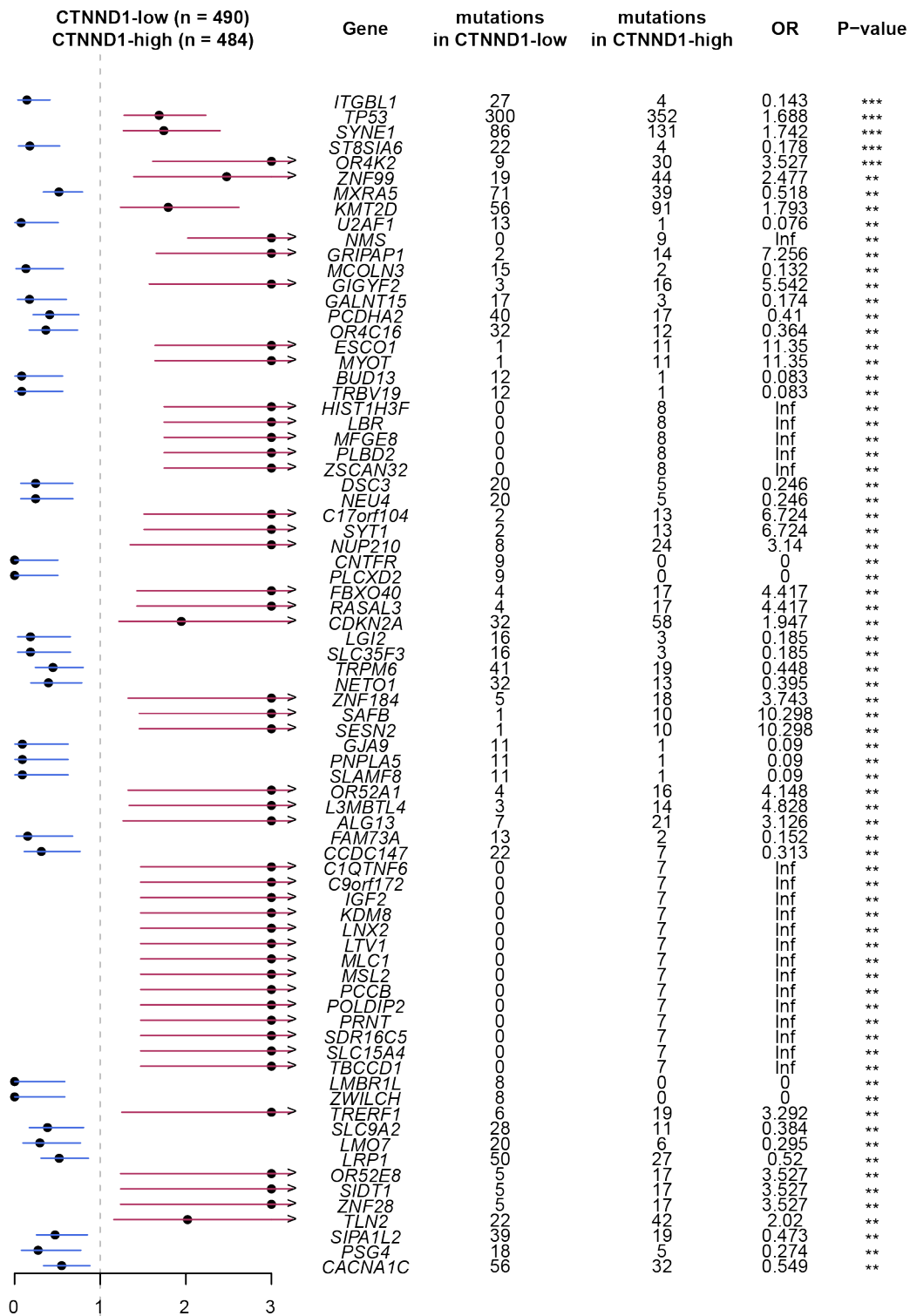
Supplementary Figure 5. Comparison of CTNND1 expression between patients with different therapeutic response. Left: Stacking bar chart showing the fraction of responders and non-responders in the CTNND1-high and low groups. Right: Comparing CTNND1 mRNA between responders and non-responders. R: responders, NR: non-responders.



Supplementary Figure 6. Comparison of the 29 immunological characteristics between the CTNND1-high and low groups in the TCGA cohort.



Supplementary Figure 7. Correlation between CTNND1 expression and the enrichment scores of immune subpopulations and immune-related signaling pathways in the TCGA cohort.



Supplementary Figure 8. Comparison of mutation variants between CTNND1-high and low groups.