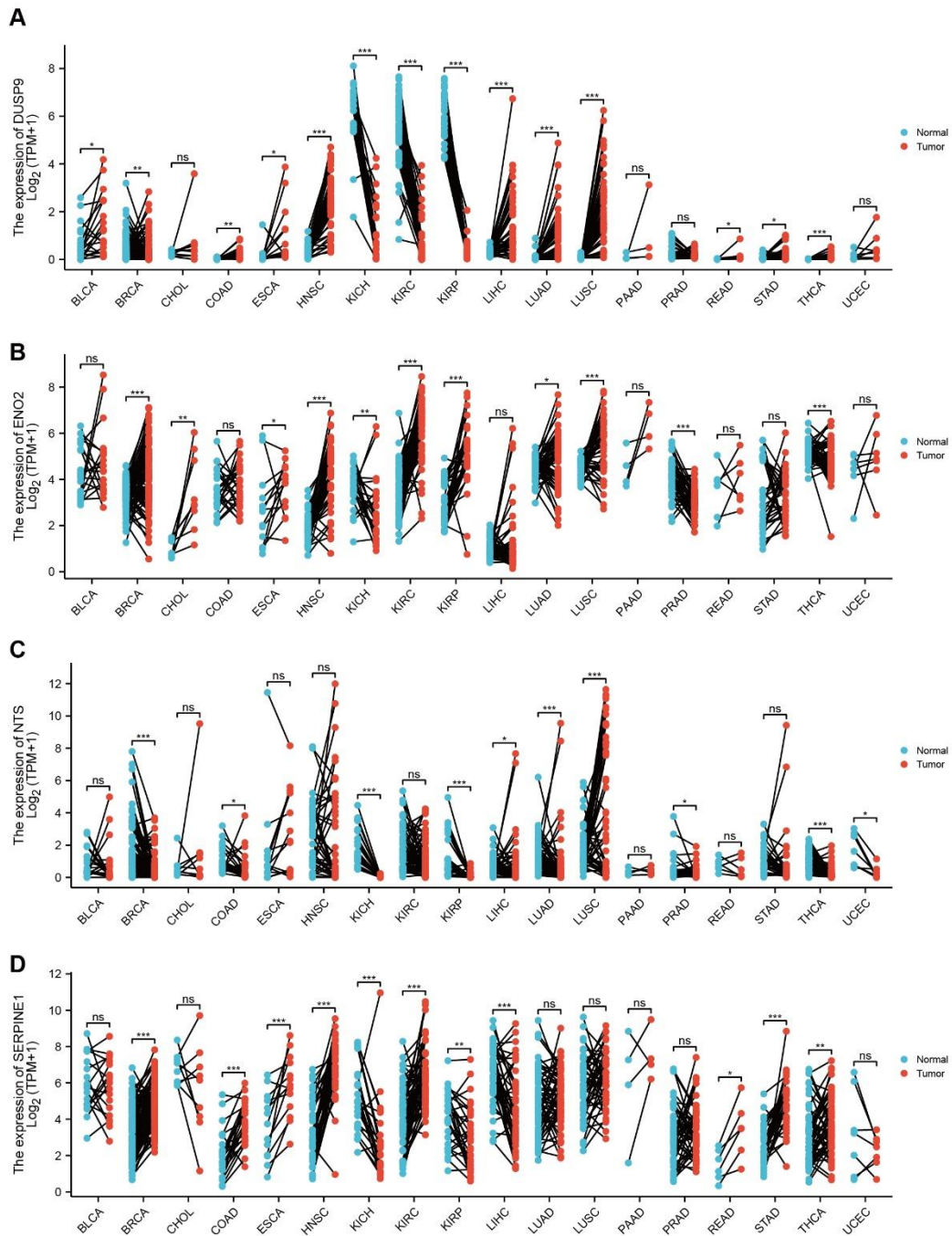
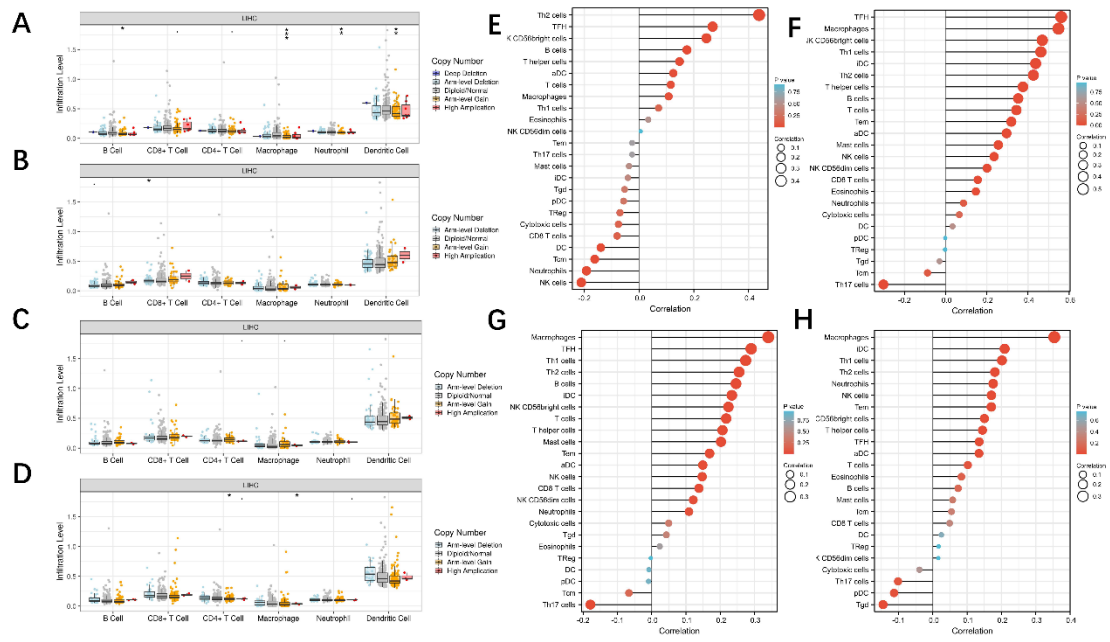


## Supplementary Material



**Supplement Figure 1** Expression of the four molecules in multiple paired tumor and normal tissues in the TCGA database. (A) Expression analysis of DUSP9 in pan-cancer. (B) Expression analysis of ENO2 in pan-cancer. (C) Expression analysis of NTS in pan-cancer. (D) Expression analysis of SERPINE1 in pan-cancer. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$ ; ns, indicates no statistical significance.



**Supplement Figure 2** The relationship between insulin resistance and immunity. (A-D) Comparison of tumor infiltration levels with different somatic copy number alterations in liver cancer among the four genes in the TIMER database. (E-H) Correlation diagram of the four molecules with immune cells. \*P<0.05, \*\*P<0.01, \*\*\*P<0.001.