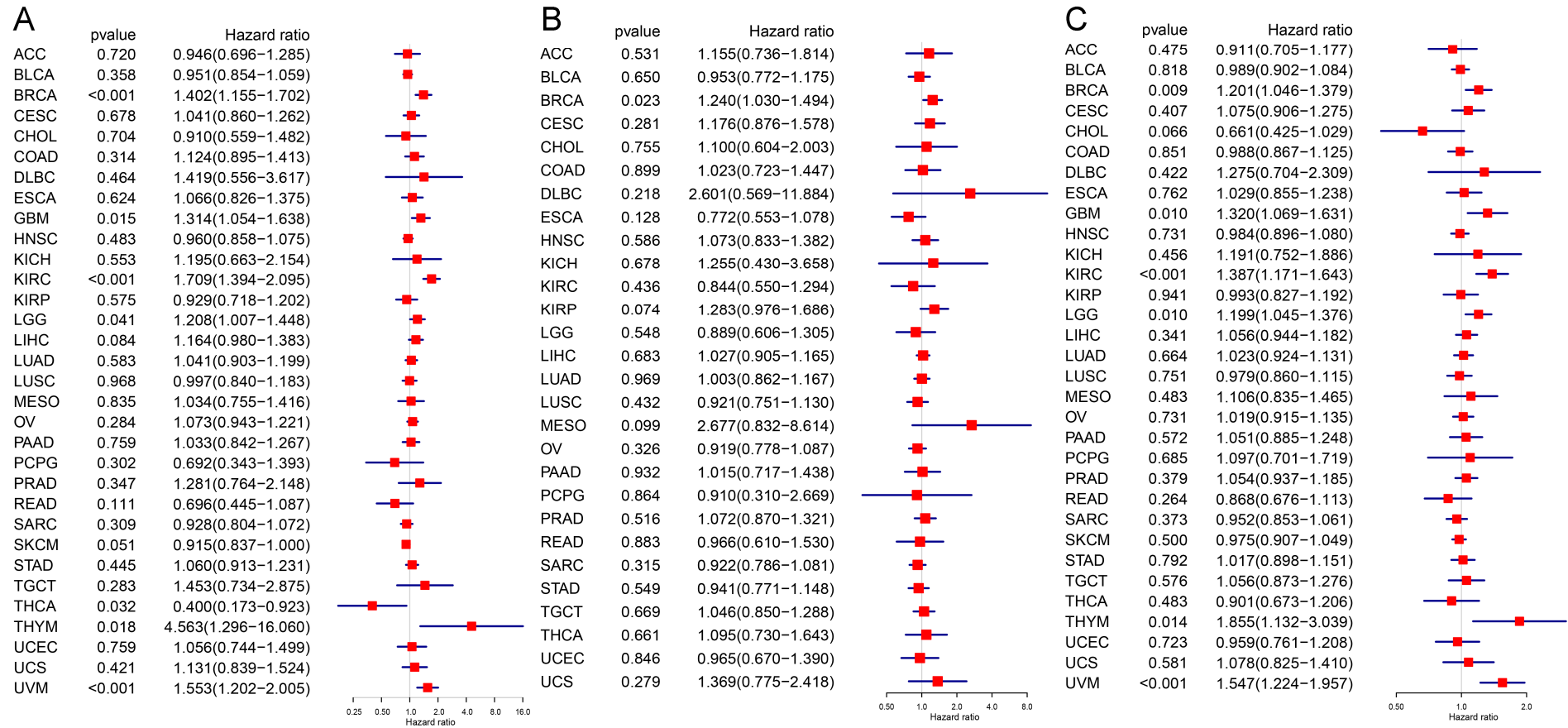
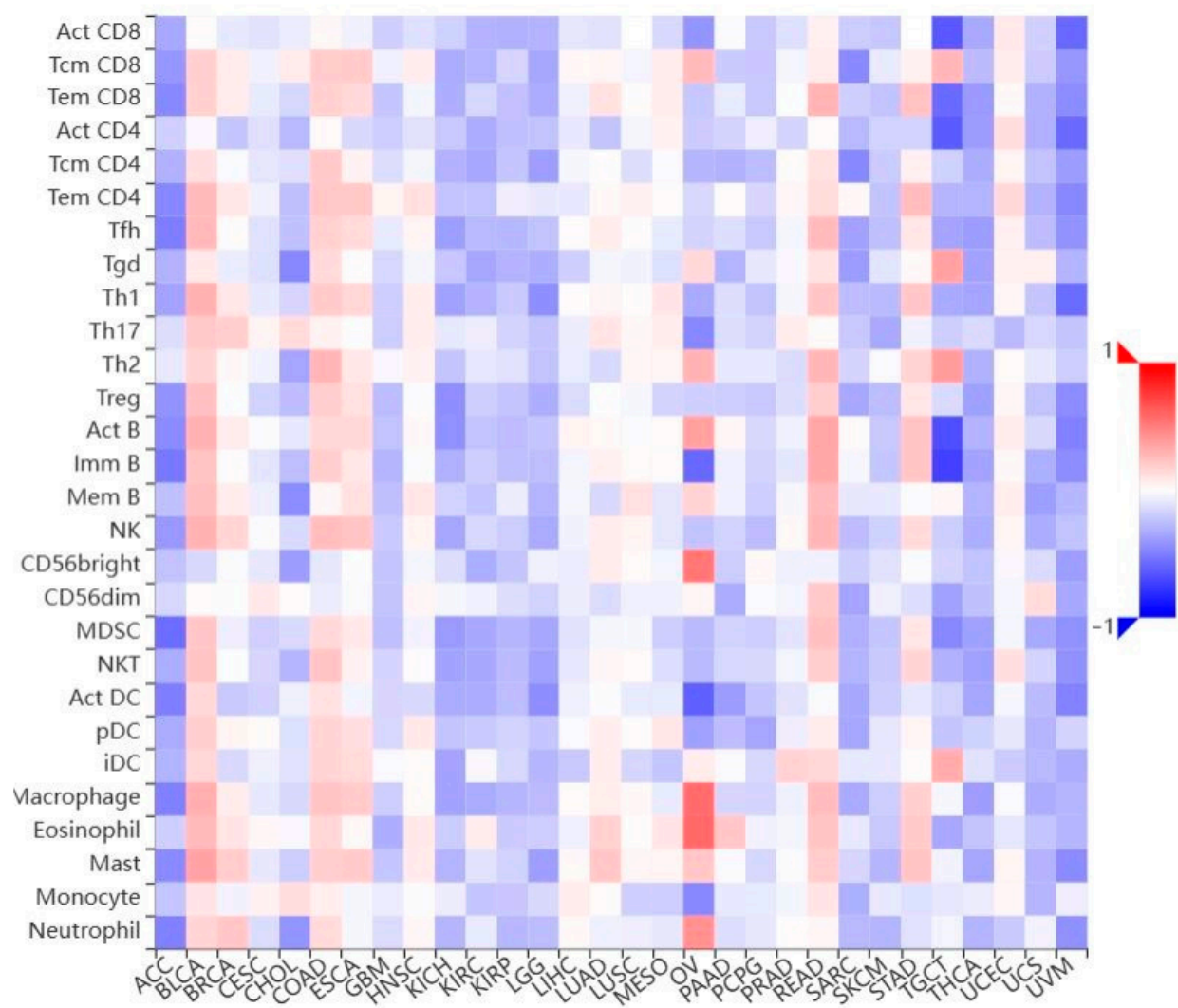


**Figure S1.** Waterfall showing the top mutated genes and mutated types in the high TRPM2 expression patients with UCS (A), OV (B), and LUSC (C).

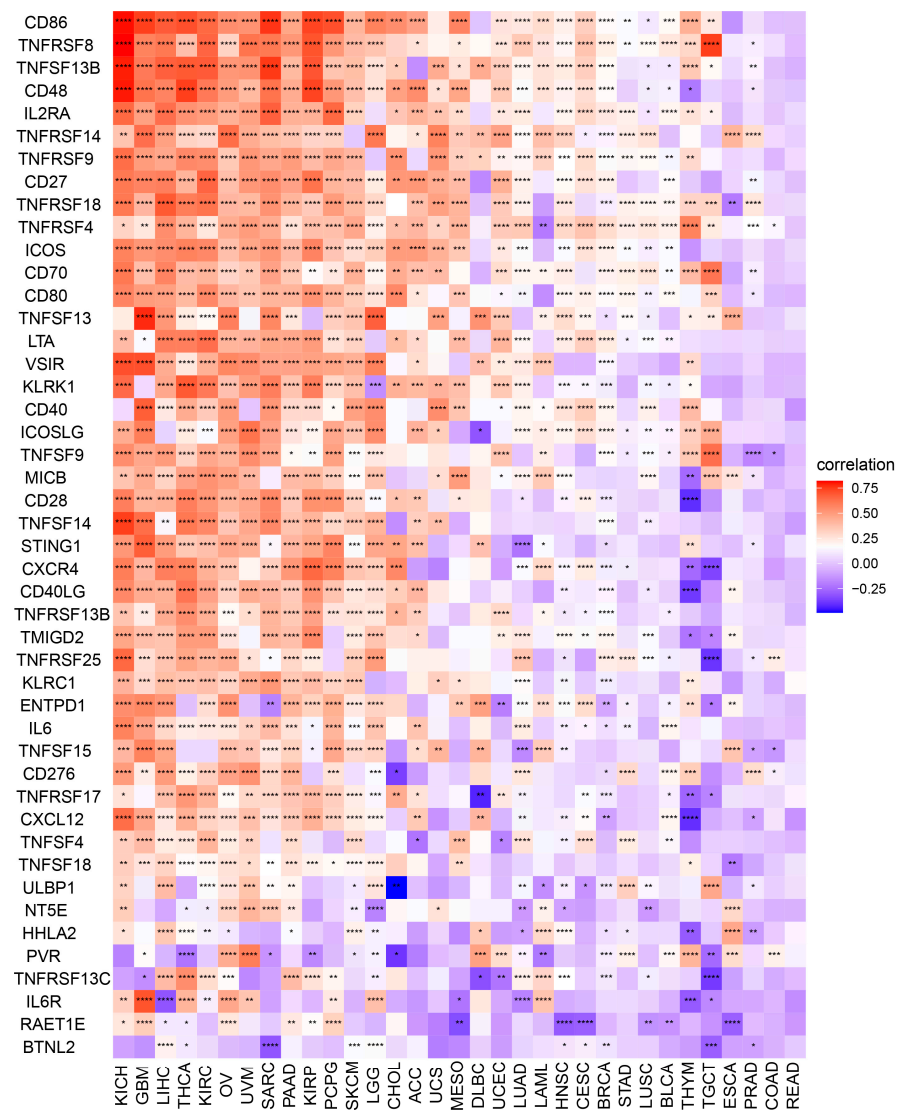


**Figure S2.** Univariate COX regression analysis of TRPM2 with (A) DSS; (B) DFI; (C) PFI.

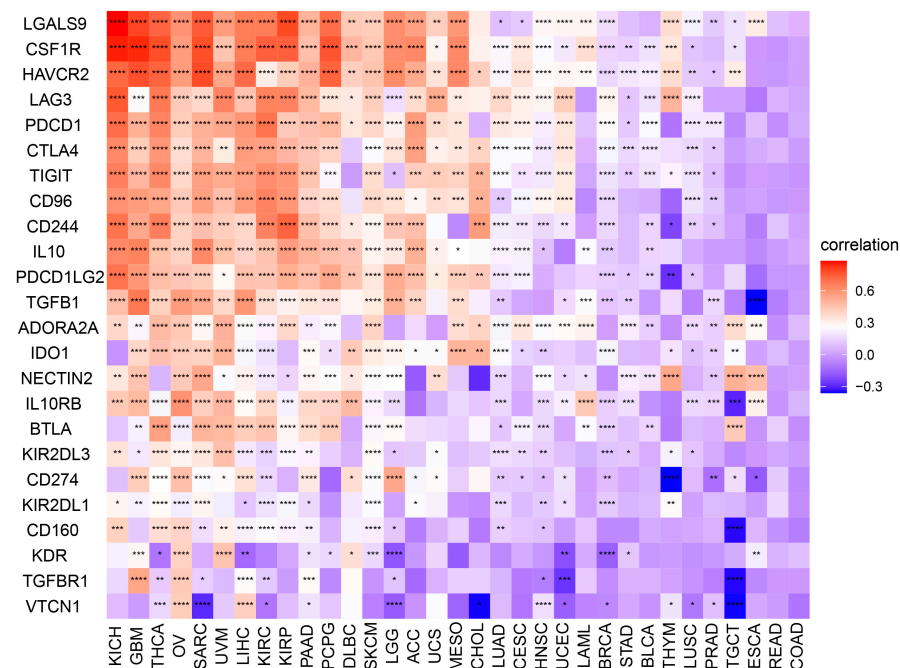


**Figure S3.** The correlation between methylation of TRPM2 and immunocyte infiltration.

A



B



**Figure S4.** Correlation of TRPM2 expression with (A) immune activation genes; (B) immunosuppressive genes. \* Indicates  $p$ -value  $< 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ ; \*\*\*\*  $p < 0.0001$ .