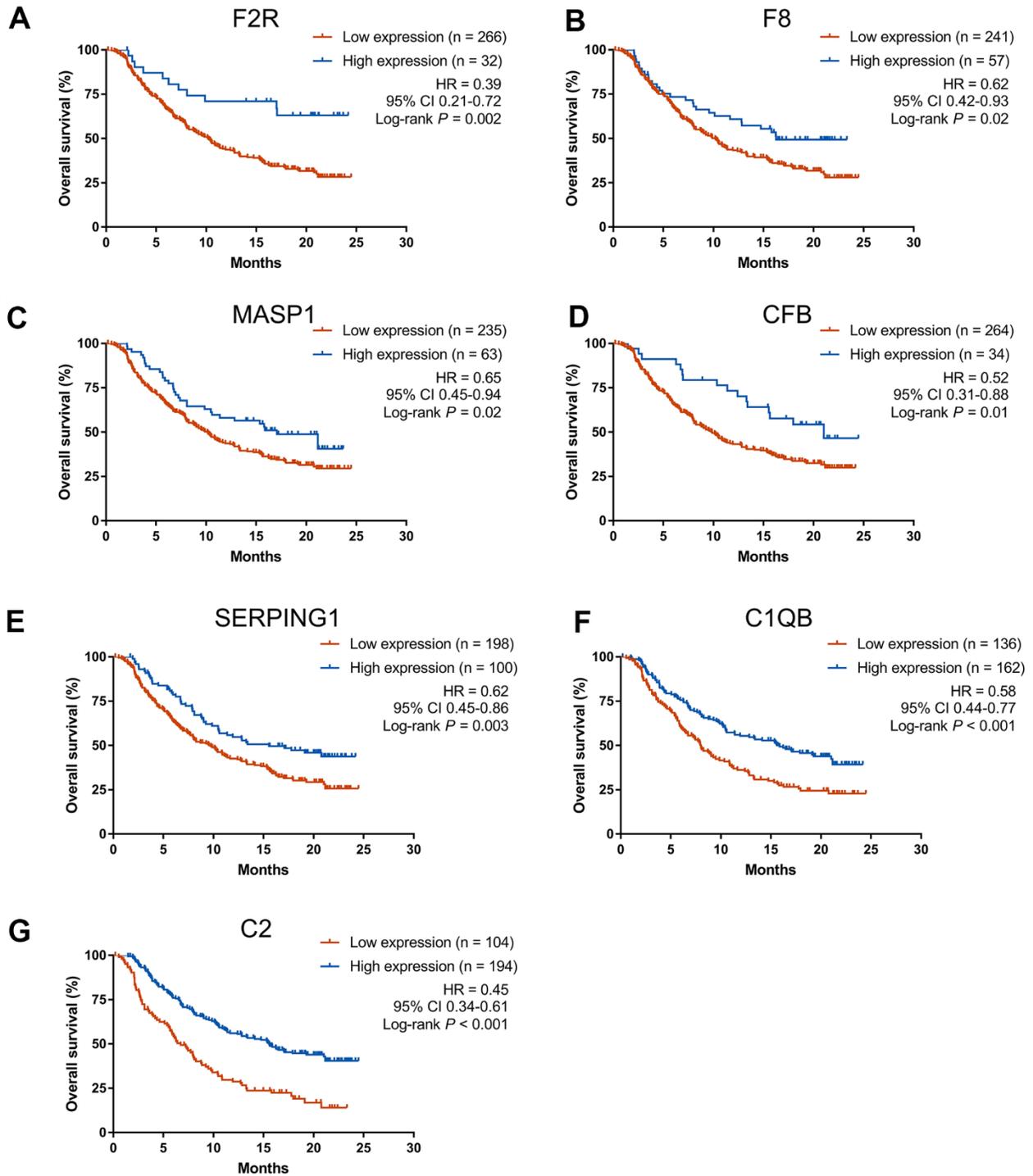
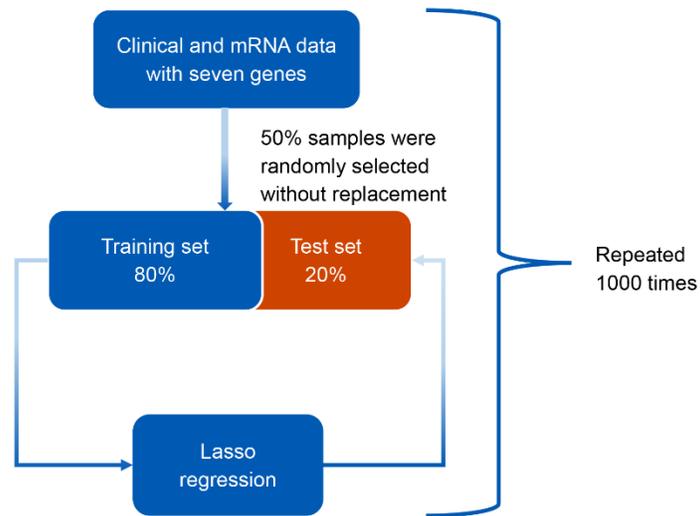


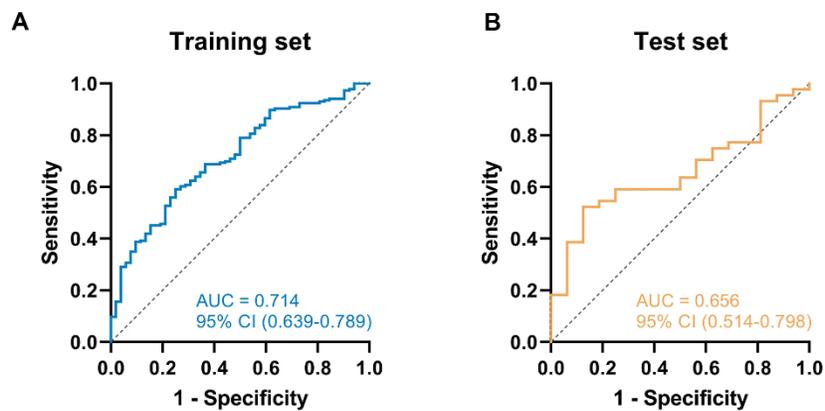
**SUPPLEMENTARY FIGURES**



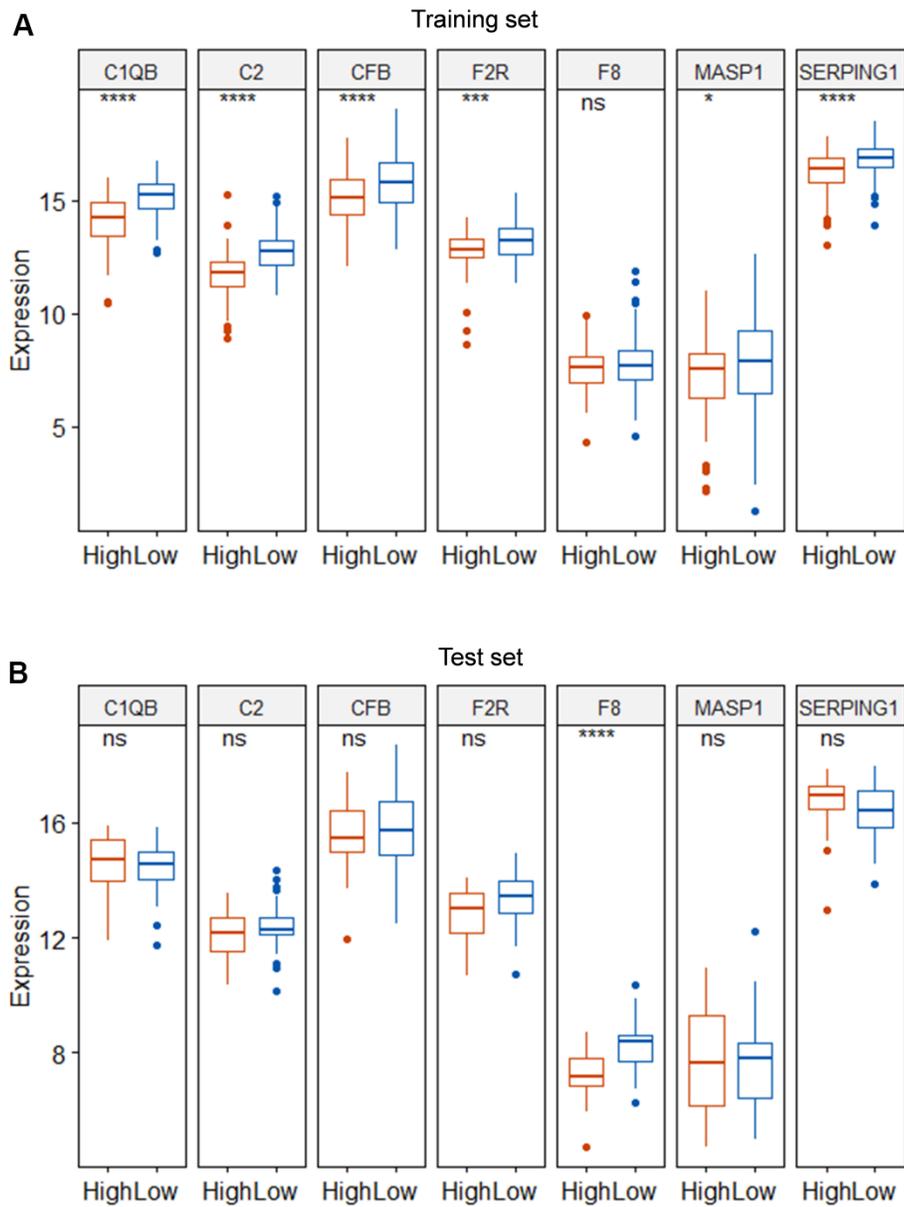
**Supplementary Figure 1.** Kaplan-Meier curves of OS comparing patients with high and low gene expression of the seven core genes included in the CCCP risk model: F2R (A), F8 (B), MASP1 (C), CFB (D), SERPING1 (E), C1QB (F), C2 (G).



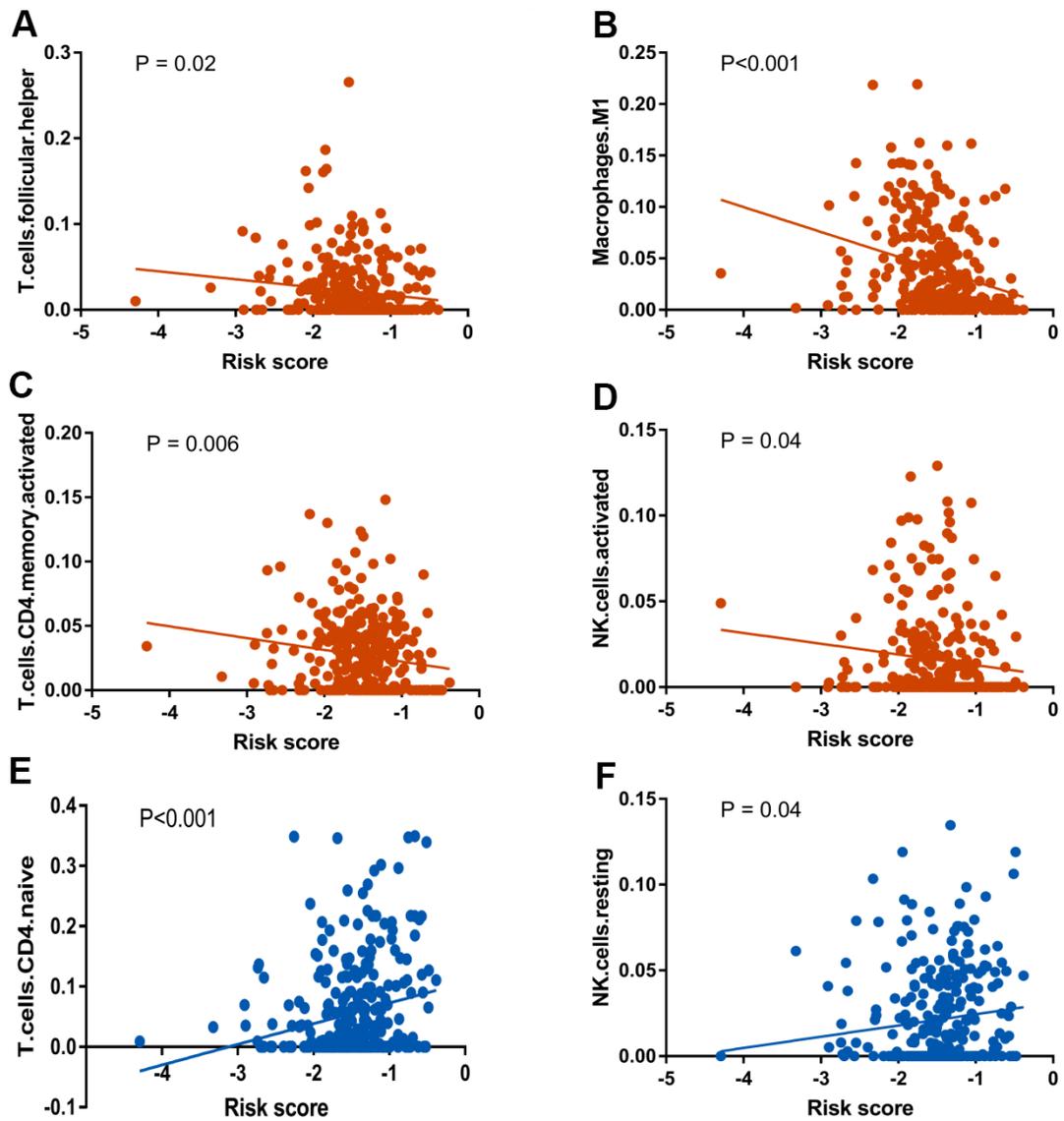
**Supplementary Figure 2.** The CCCP risk model was constructed with seven selected genes in complement and coagulation cascades pathway. The data-splitting strategy was implemented with 80% and 20% samples, which were used as training and test set respectively by repeating 1000 times.



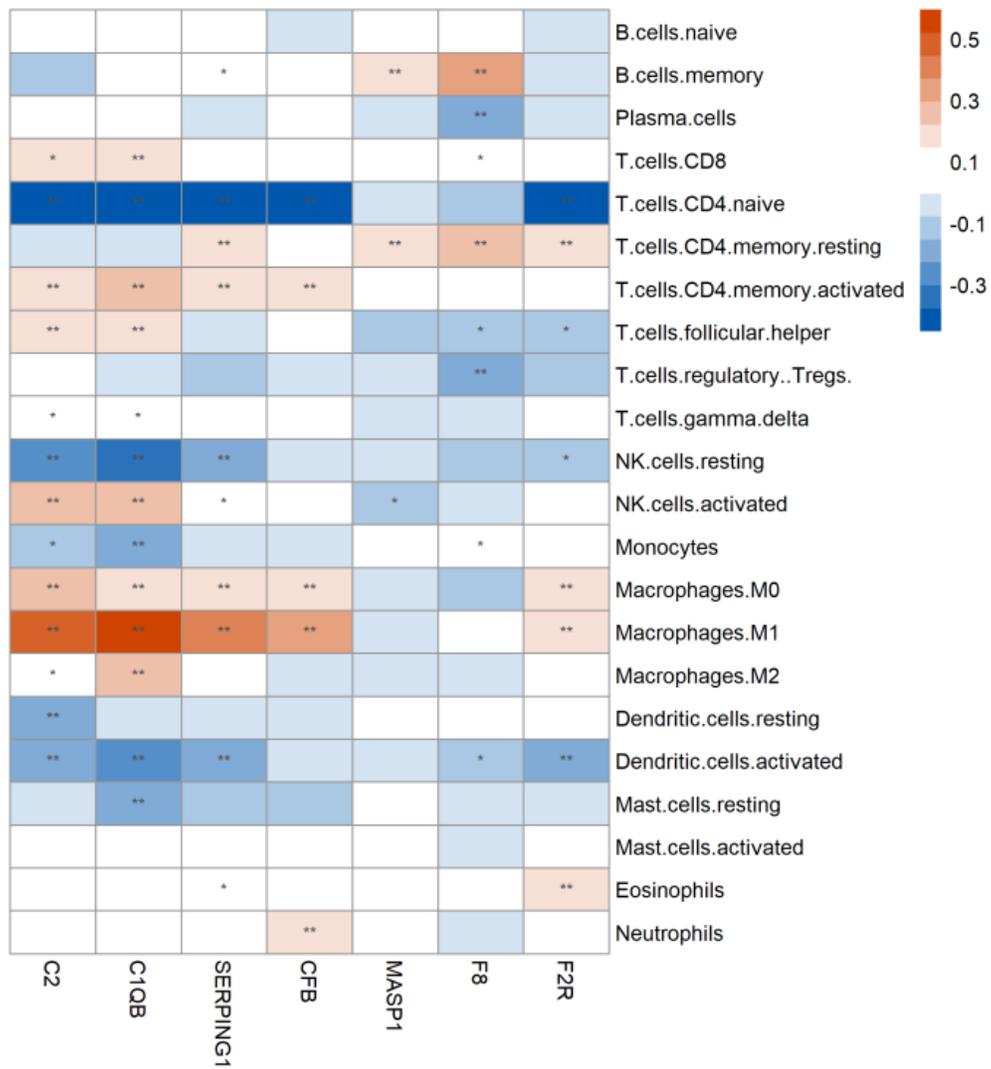
**Supplementary Figure 3.** The ROC of CCCP risk score in predicting response to ICIs in the training set (A) and test set (B).



**Supplementary Figure 4.** Comparison of the expression of the seven core genes between patients with high- and low-risk in the training (A) and test (B) sets.



**Supplementary Figure 5.** Correlation between the risk score and follicular helper T cells (A), Macrophages M1 (B), activated CD4+ memory T cells (C), activated NK cells (D), naive CD4+ T cells (E), and resting NK cells (F). NK: natural killer.



Supplementary Figure 6. Correlation between the immune cell infiltrates and the expression of the seven core genes included in the CCCP risk model.