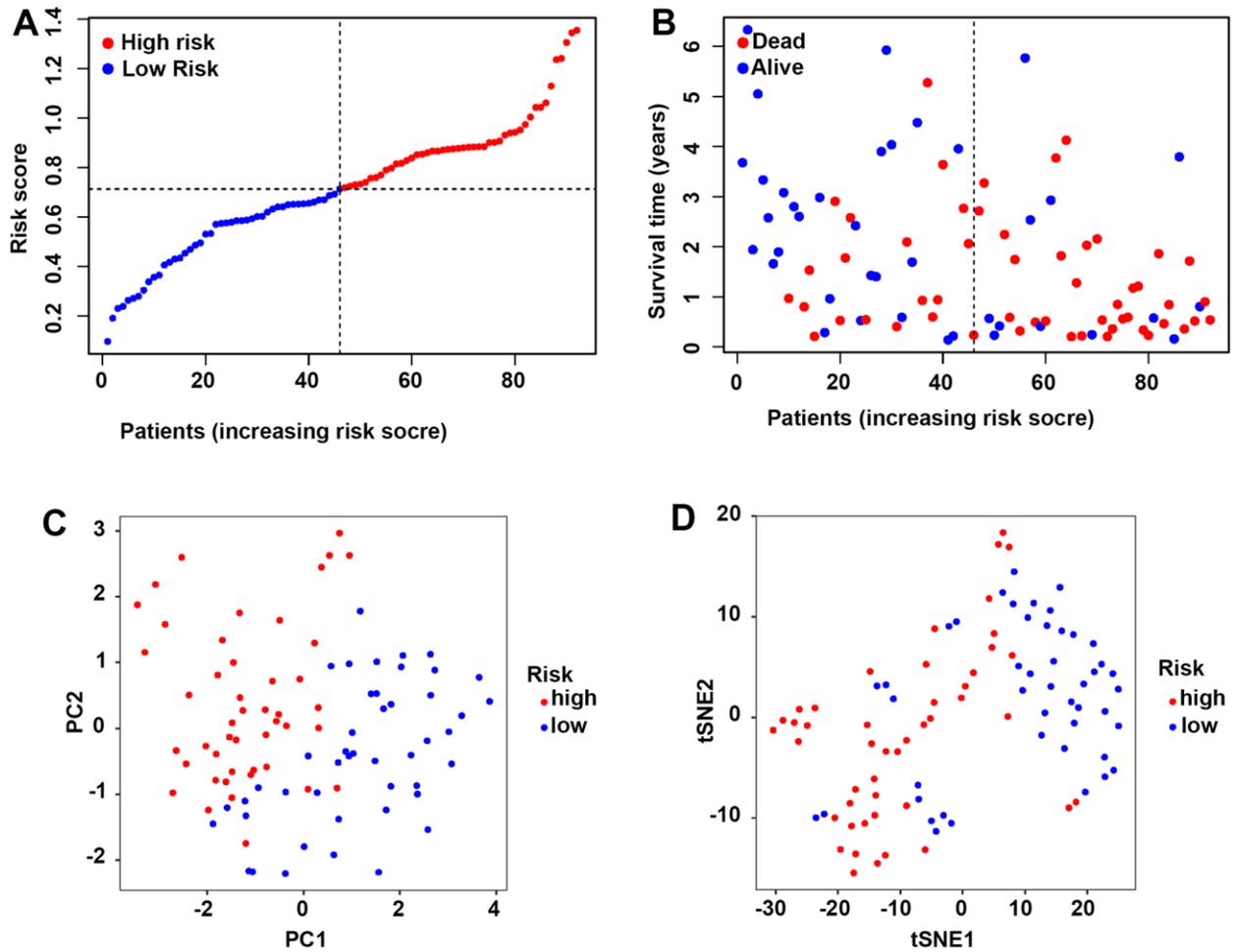
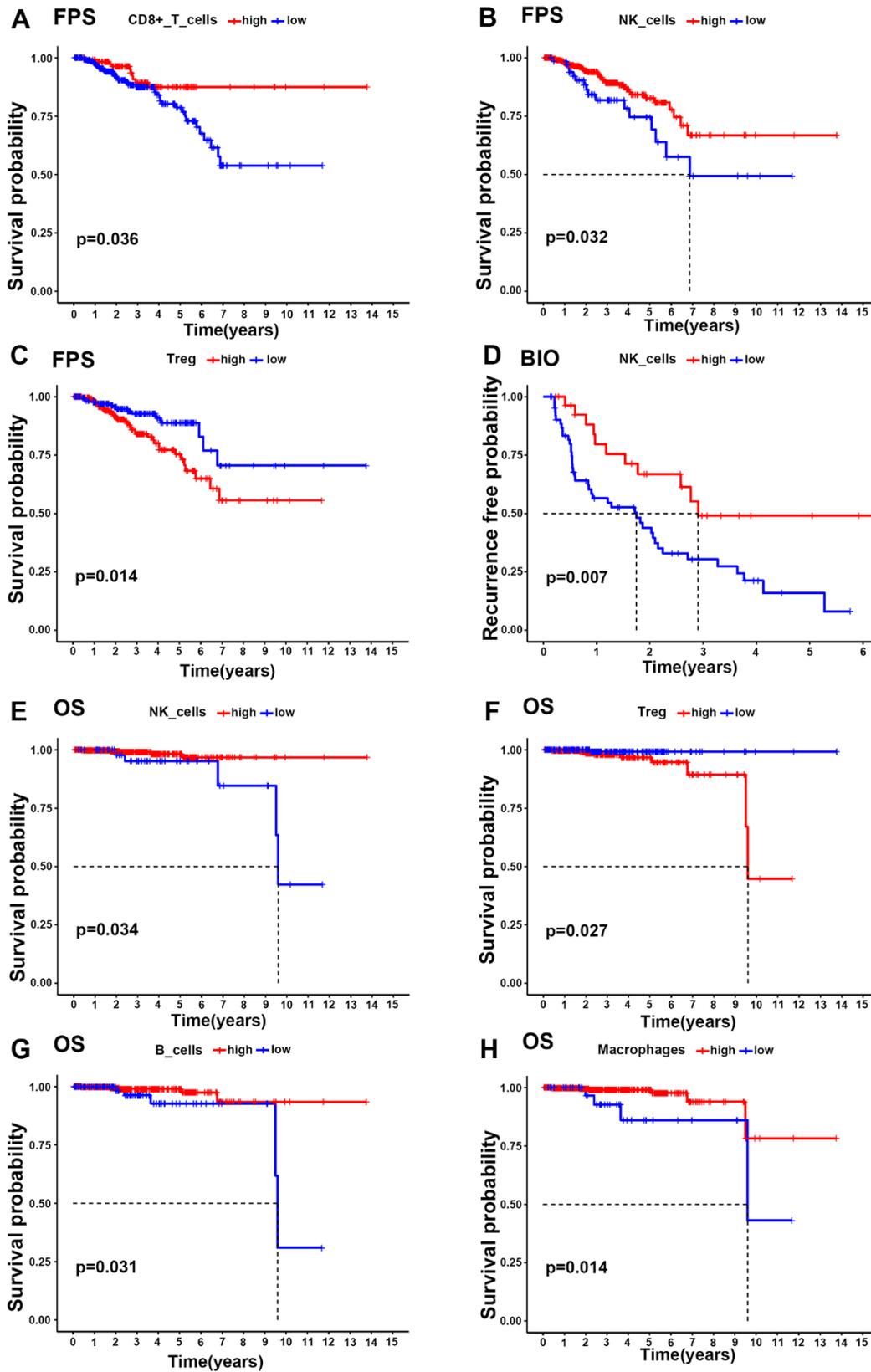


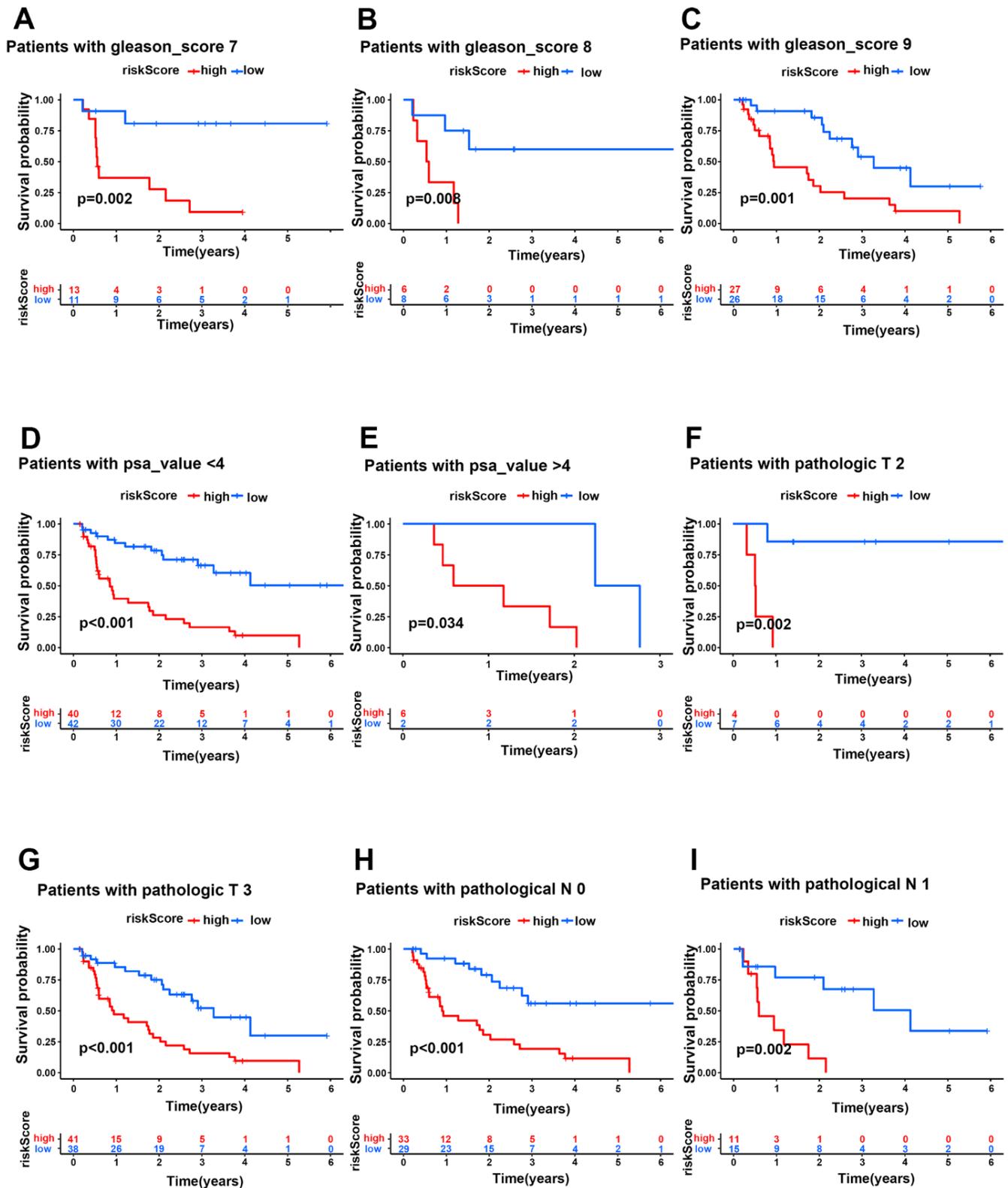
## SUPPLEMENTARY FIGURES



**Supplementary Figure 1.** (A) Ninety-two PCa patients with biochemical recurrence were separated into the HR group and LR group based on the median risk score in the TCGA cohort. (B) Survival status of 92 PCa patients with biochemical recurrence in the TCGA cohort. (C, D) Principal component analysis (PCA) and t-distributed stochastic neighbor embedding (t-SNE) plot for the two risk groups in the TCGA cohort.



**Supplementary Figure 2.** (A–C) Kaplan–Meier analysis for PFS of CD8<sup>+</sup> T cells (A), NK cells (B) and Treg cells (C) in two risk groups in the TCGA cohort. (D) Kaplan–Meier analysis of the biochemical recurrence of NK cells in the two risk groups in the TCGA cohort. (E–H) Kaplan–Meier analysis for OS of NK cells (E), Treg cells (F), B cells (G) and macrophages (H) in two risk groups in the TCGA cohort.



**Supplementary Figure 3.** (A–I) Kaplan–Meier survival analysis for PCa patients under different subgroups of clinical characteristics including Gleason score 7–9 (A–C), PSA-value >4 and PSA-value <4 (D, E), pathologic T2, T3, N0 and N1 (F–I) in two risk groups in TCGA cohort.