

Figure S1 Validation of the Five-Gene Risk Signature. (A) KM survival curves, heatmap and scatter plot in the testing set. (B) KM survival curves, heatmap and scatter plot in the whole set.

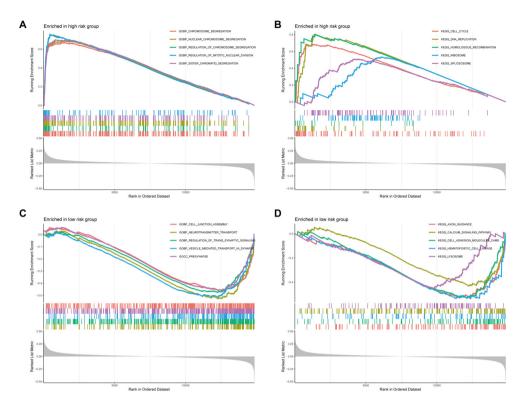


Figure S2 GSEA of High and Low-Risk Groups. (A) Enrichment plot showing pathways related to chromosome segregation and cell cycle in the high-risk group. (B) Enrichment plot displaying pathways associated with nuclear chromosome segregation and homologous recombination in the high-risk group. (C) Enrichment plot indicating pathways related to cell junction assembly and neurotransmitter transport in the low-risk group. (D) Enrichment plot showing pathways associated with cell adhesion molecules (CAMs) and lysosome in the low-risk group.

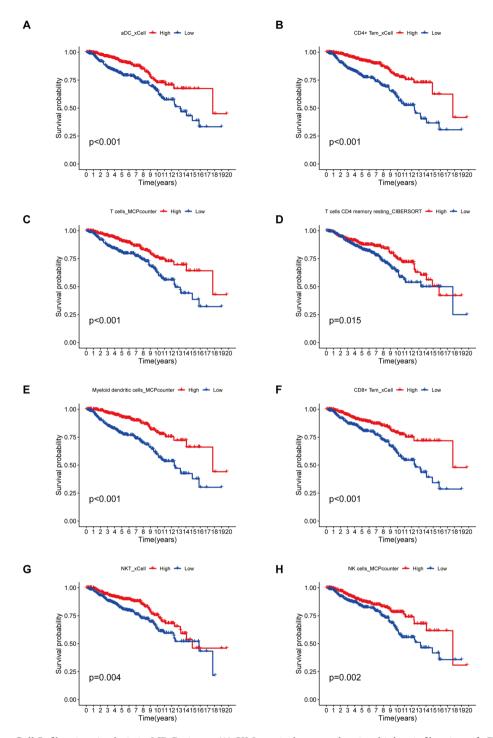


Figure S3 Immune Cell Infiltration Analysis in NB Patients. (A) KM survival curves showing higher infiltration of aDC cells with better prognosis in NB patients. (B) KM survival curves showing higher infiltration of CD4+ Tem cells with better prognosis in NB patients. (C) KM survival curves indicating higher infiltration of T cells with better prognosis in NB patients. (D) KM survival curves showing higher infiltration of CD4 memory resting T cells with better prognosis in NB patients. (E) KM survival curves showing higher infiltration of myeloid dendritic cells with better prognosis in NB patients. (F) KM survival curves displaying higher infiltration of CD8+ Tem cells with better prognosis in NB patients. (G) KM survival curves showing higher infiltration of NKT cells with better prognosis in NB patients. (H) KM survival curves correlating higher infiltration of NK cells with better prognosis in neuroblastoma patients.

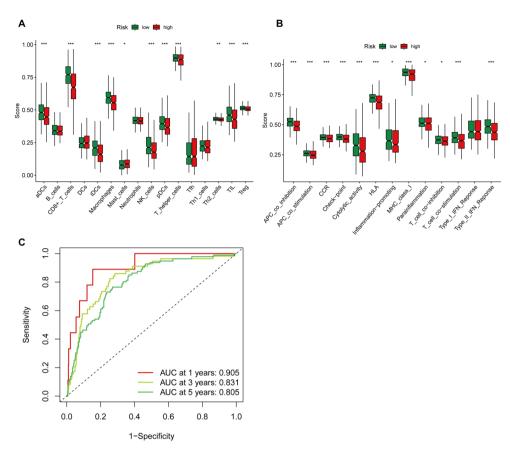


Figure S4 Immune Function and Checkpoint Analysis in High and Low-Risk Groups. (A) ssGSEA scores for various immune functions in high-risk and low-risk groups. (B) Boxplot comparing the expression levels of immune checkpoints between high-risk and low-risk groups. (C) ROC curves evaluating the predictive accuracy of the comprehensive nomogram for 1-, 3-, and 5-year overall survival.