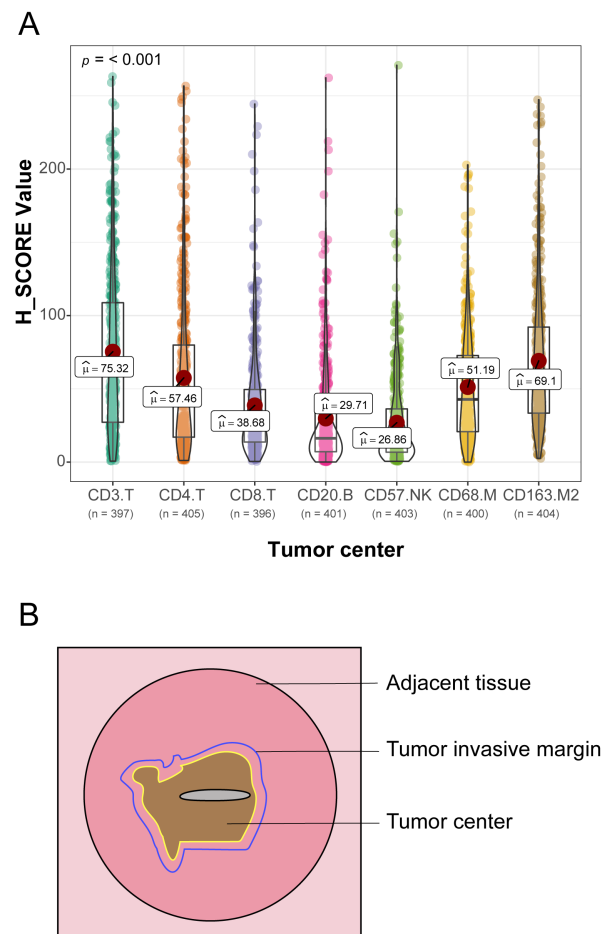**Supplementary Data**

A

B

Figure S1. H-SCORE of immune cells in the tumour centre and area chart A, Expression levels of seven immune cell markers in the tumour centre. B, Illustration of the adjacent tissue and tumour centre.
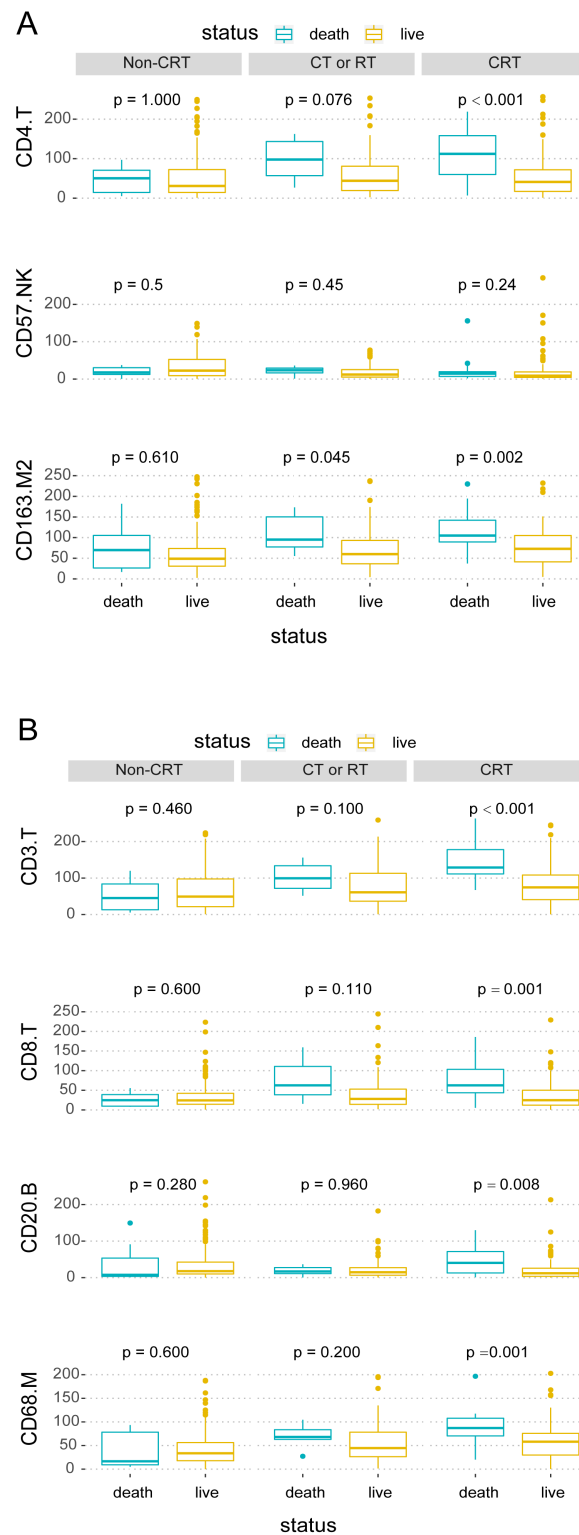
Figure S2. Correlations between immune cells, chemoradiotherapy, and prognosis A and B, Box chart displays comparison of the differences in infiltration of CD3+, CD4+, CD8+, CD20+, CD68+, and CD163+ cells in three treatment methods and patients with different prognosis.
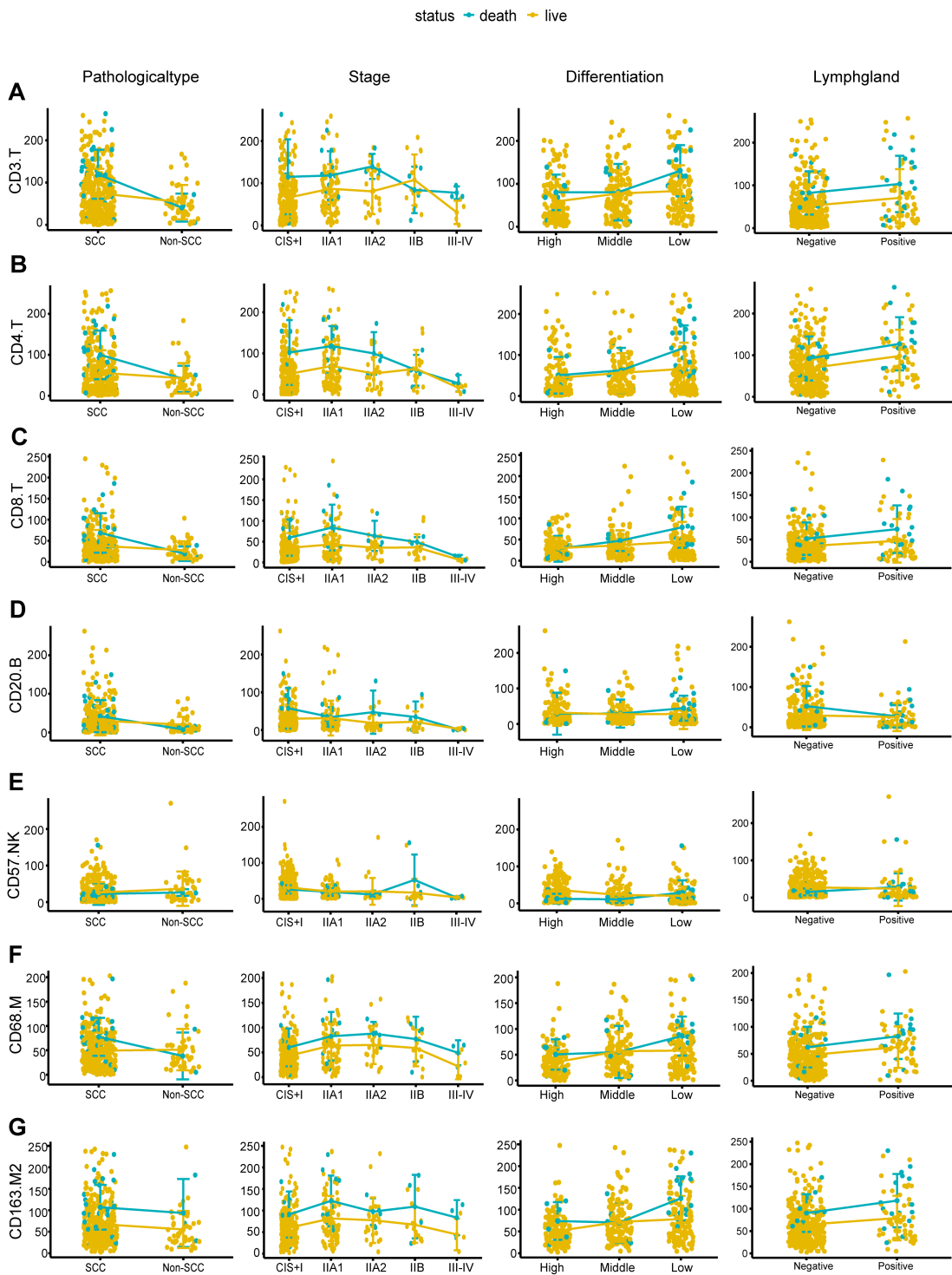
Figure S3. Correlations between immune cell levels, clinicopathological characteristics, subtypes, and prognosis Scatter chart showing the differences in clinicopathological characteristics between dead and living patients with respect to infiltration of CD3+, CD4+, and CD8+ T cells, CD20+ B cells, CD57+ NK cells, CD68+ macrophages, and CD163+ M2 macrophages.
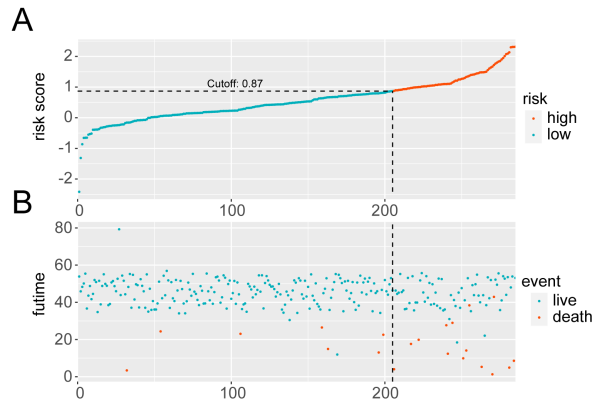
Figure S4. The risk curve of the training queue. A, The smooth curve shows the risk score threshold was 0·87 in the training queue. B, Survival after 36 months. Red and blue dots indicate deceased and living patients, respectively.
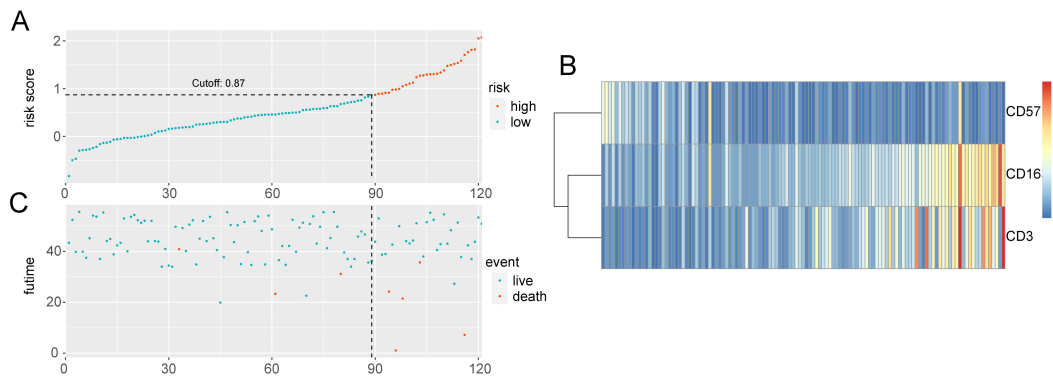

Figure S5. Risk curve and heat map of the validation queue A, The smooth curve indicates the risk score threshold (0·87) in the validation queue. B, Each point corresponds to a patient's survival time, with red and blue indicating deceased and living patients, respectively. C, Heat map of the levels of three immune cell types.
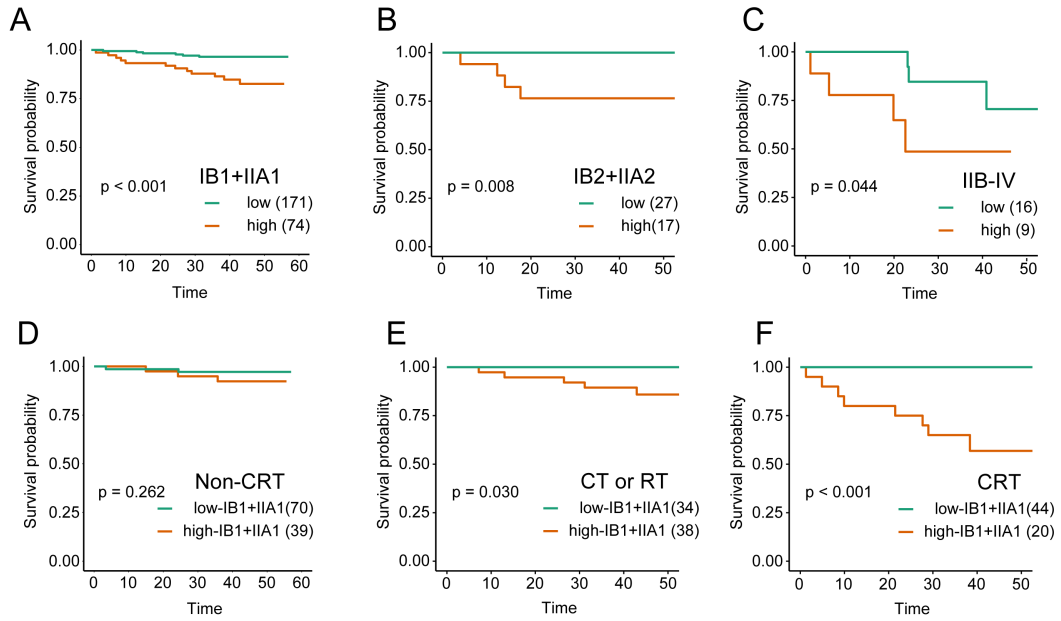
Figure S6. Prognosis prediction in different stages and the effects of different treatments in stages IB1+IIA1 A, B, and C, Survival analysis showing the differences between patients with high risk scores and those with low risk scores in each of the three groups. E and F, Survival analysis showing the differences between patients with high risk scores and those with low risk scores in each of the IB1+IIA1 subgroups (i.e., non-CRT, CT or RT, and CRT).