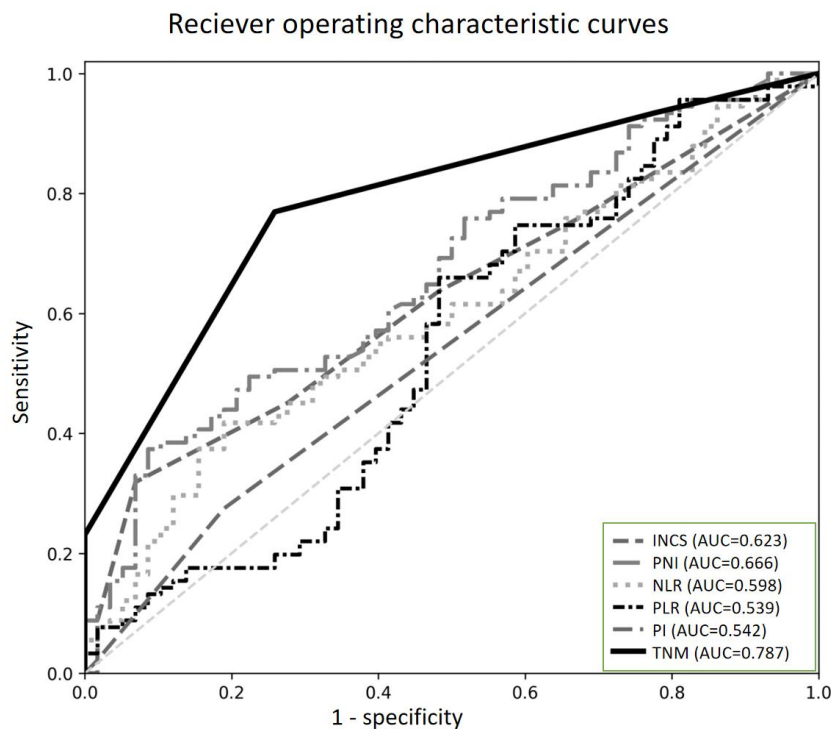
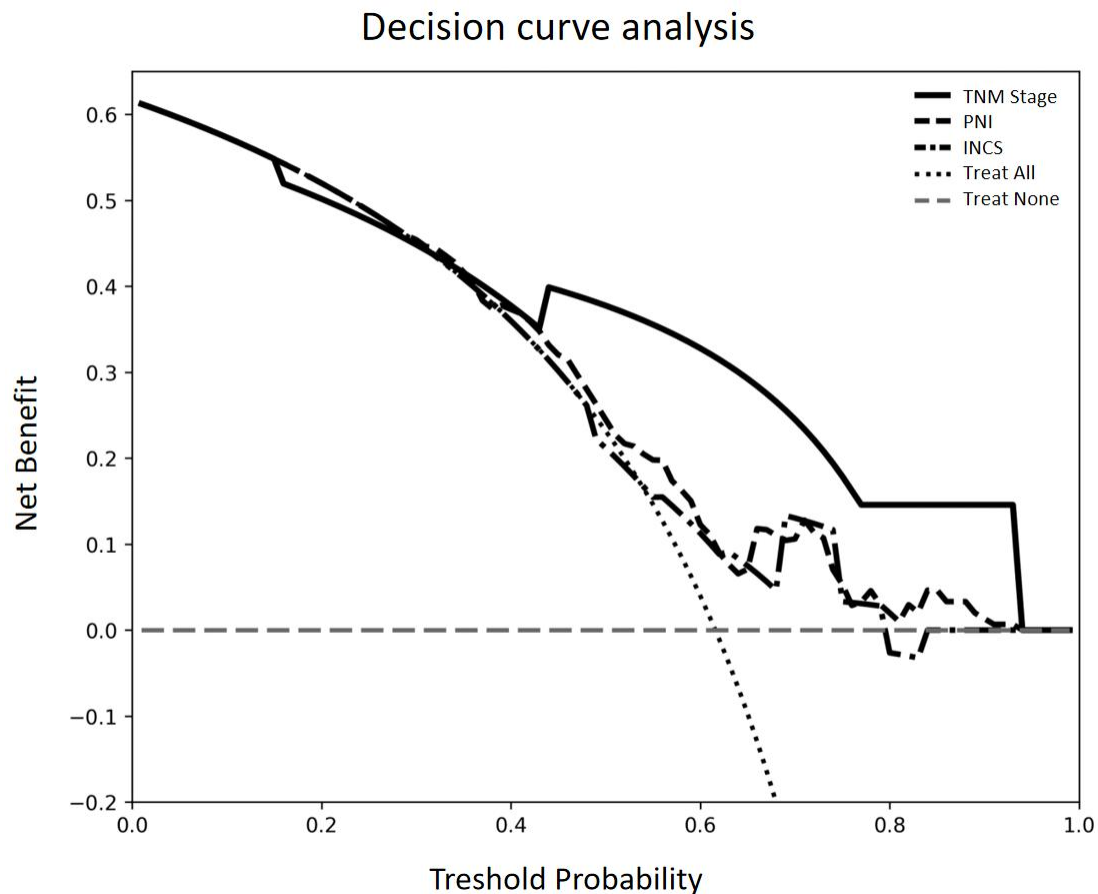
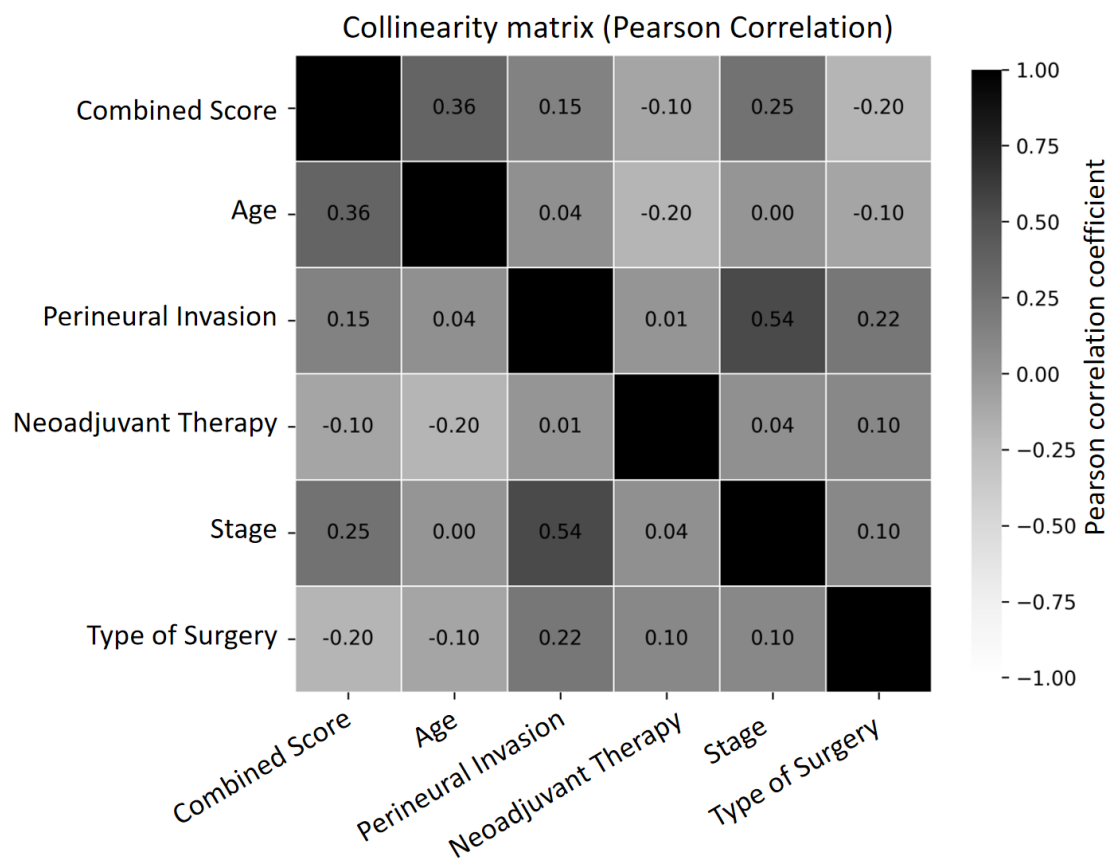




Supplementary Figure 1 Receiver operating characteristic curves comparing the discriminative performance of the Inflammation/Nutrition-based Combined Score, Prognostic Nutritional Index, neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio, prognostic index, and tumor-node-metastasis stage for overall survival. The area under the curve (AUC) values are presented in the legend. Higher AUC values indicate better discriminative ability. Prognostic Nutritional Index was inversely transformed to ensure consistent directionality, with higher values reflecting increased risk. The diagonal dashed line represents no discriminative ability (AUC = 0.5). INCS: Inflammation/Nutrition-based Combined Score; PNI: Prognostic Nutritional Index; NLR: Neutrophil-to-lymphocyte ratio; PLR: Platelet-to-lymphocyte ratio; PI: Prognostic index.



Supplementary Figure 2 Decision curve analysis comparing the net clinical benefit of TNM stage, the Prognostic Nutritional Index, and the Inflammation/Nutrition-based Combined Score across a range of threshold probabilities. The tumor-node-metastasis model showed the highest net benefit at intermediate and higher thresholds, whereas both Prognostic Nutritional Index and Inflammation/Nutrition-based Combined Score demonstrated comparable benefit at lower thresholds. The “treat none” strategy is presented as a reference. INCS: Inflammation/Nutrition-based Combined Score; PNI: Prognostic Nutritional Index; TNM: Tumor-node-metastasis.



Supplementary Figure 3 Collinearity matrix (Pearson correlation) showing the relationship between all covariates included in the multivariable survival models.

Supplementary Table 1 Pairwise comparison of area under the curve values for prognostic markers using DeLong's test for overall survival

Comparison	AUC 1	AUC 2	P value
INCS <i>vs</i> PNI	0.623	0.666	0.136
INCS <i>vs</i> NLR	0.623	0.598	0.404
INCS <i>vs</i> PLR	0.623	0.539	0.015
INCS <i>vs</i> PI	0.623	0.542	0.074
PNI <i>vs</i> NLR	0.666	0.598	0.115
PNI <i>vs</i> PLR	0.666	0.539	0.002
PNI <i>vs</i> PI	0.666	0.542	0.022

NLR <i>vs</i> PLR	0.598	0.539	0.133
NLR <i>vs</i> PI	0.598	0.542	0.287
PLR <i>vs</i> PI	0.539	0.542	0.957
TNM + INCS <i>vs</i> TNM	0.805	0.787	0.223

INCS: Inflammation/Nutrition-based Combined Score; PNI: Prognostic Nutritional Index; NLR: Neutrophil-to-lymphocyte ratio; PLR: Platelet-to-lymphocyte ratio; PI: Prognostic index; TNM: Tumor-node-metastasis; AUC: Area under the curve.