Supplementary Table S2. Robustness of the association between the preoperative triglyceride–glucose index and 5-year all-cause mortality after additional adjustment for inflammatory and nutritional indices

Model	N	Events	HR (95% CI)	*P* value
Primary fully adjusted model	492	121	1.29 (1.06–1.57)	0.011
Model 2 + elevated CRP (>5 mg/L)	492	121	1.30 (1.06–1.58)	0.010
Model 2 + high NLR (≥3.0)	492	121	1.28 (1.05–1.56)	0.013
Model 2 + high PLR (≥150)	492	121	1.29 (1.06–1.57)	0.012
Model 2 + low PNI (<45)	492	121	1.32 (1.08–1.61)	0.006
Model 2 + high mGPS (score 2)	492	121	1.29 (1.06–1.57)	0.012

The primary fully adjusted model included age, sex, body mass index, diabetes mellitus, hypertension, emergency surgery, tumor site, ECOG performance status, TNM stage, and tumor differentiation.

CRP, NLR, PLR, PNI, and mGPS were added **separately**, one at a time, to the primary fully adjusted model rather than simultaneously.

Inflammatory and nutritional indicators were categorized using literature-supported thresholds: CRP ≤5 mg/L versus >5 mg/L; NLR <3.0 versus ≥3.0; PLR <150 versus ≥150; and PNI ≥45 versus <45. For mGPS, original scores of 0 and 1 were combined as the reference group, while a score of 2 was classified as the high-risk group.

For all binary indicators, 0 represented the lower-risk/reference group and 1 represented the higher-risk group. Hazard ratios are presented per 1-SD increase in the TyG index.

Abbreviations: CI, confidence interval; CRP, C-reactive protein; ECOG, Eastern Cooperative Oncology Group; HR, hazard ratio; mGPS, modified Glasgow Prognostic Score; NLR, neutrophil-to-lymphocyte ratio; PLR, platelet-to-lymphocyte ratio; PNI, prognostic nutritional index; SD, standard deviation; TNM, tumor-node-metastasis; TyG, triglyceride–glucose index.