

Table S1 Univariate and multivariate analysis of prognostic factors for OS

Variables	Univariate analysis		Multivariate analysis	
	P	HR (95% CI)	P	HR (95% CI)
Age, years				
<60		1.00 (reference)		
≥60	0.34	1.51 (0.66–3.46)		
Gender				
Male		1.00 (reference)		
Female	0.21	0.28 (0.04–2.05)		
Smoke				
No		1.00 (reference)		
Yes	0.79	0.90 (0.40–2.00)		
BMI	0.83	1.02 (0.89–1.16)		
Location				
Left		1.00 (reference)		
Right	0.08	2.04 (0.91–4.54)		
Tumor remission grade after surgery				
IIA		1.00 (reference)		
MPR	0.23	0.55 (0.20–1.47)		
pCR	0.13	0.44 (0.15–1.29)		
Pathology				
SCC		1.00 (reference)		
AC	0.10	1.90 (0.89–4.06)		
Targeted Therapy				
No		1.00 (reference)		
Yes	0.46	0.74 (0.33–1.64)		
ypTNM				
I		1.00 (reference)		1.00 (reference)
II	0.59	0.69 (0.18–2.61)	0.72	0.78 (0.20–3.03)
III	0.003*	3.73 (1.54–9.02)	<0.001*	5.72 (2.05–15.97)
IV	0.02*	4.917 (1.30–18.61)	0.23	3.12 (0.49–19.78)
Baseline HADS-A score				
Low		1.00 (reference)		1.00 (reference)
High	<0.001*	13.71 (5.47–34.36)	0.048*	4.59 (1.01–20.77)
Preoperative HADS-A score				
Low		1.00 (reference)		1.00 (reference)
High	<0.001*	4.89 (2.12–11.27)	0.16	0.40 (0.11–1.42)
3-month postoperative HADS-A score				
Low		1.00 (reference)		1.00 (reference)
High	<0.001*	10.10 (4.49–22.73)	<0.001*	7.50 (2.85–19.71)
Baseline HADS-D score				
Low		1.00 (reference)		1.00 (reference)
High	<0.001*	16.74 (5.23–53.59)	>0.99	3.13 (0.28–34.95)
Preoperative HADS-D score				
Low		1.00 (reference)		1.00 (reference)
High	<0.001*	18.47 (5.82–58.57)	>0.99	1.39 (0.19–10.01)
3-month postoperative hads-d score				
Low		1.00 (reference)		1.00 (reference)
High	<0.001*	7.84 (2.84–21.65)	0.93	1.09 (0.20–6.02)

* indicate that these comparisons are statistically significant.

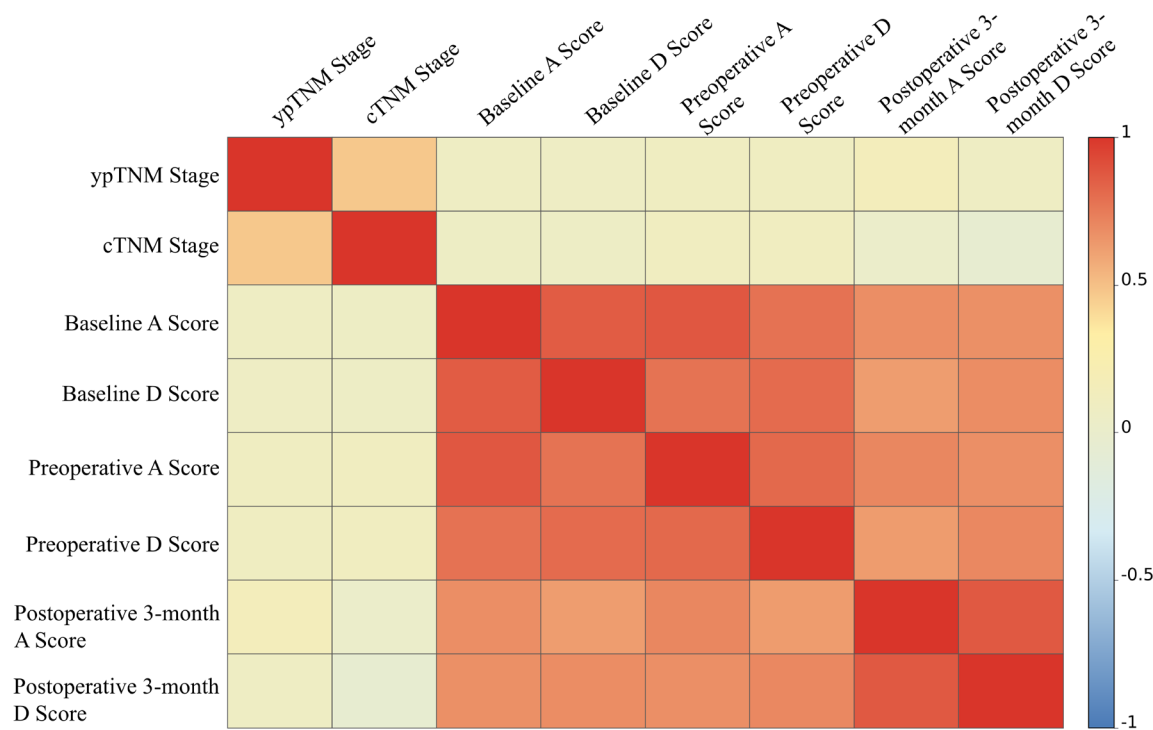


Figure S1 The heatmap shows the correlation between staging and anxiety-depression status. Red indicates a positive correlation, blue indicates a negative correlation, and a darker color represents a stronger correlation. It can be seen that there is no significant strong correlation between staging and anxiety-depression status.

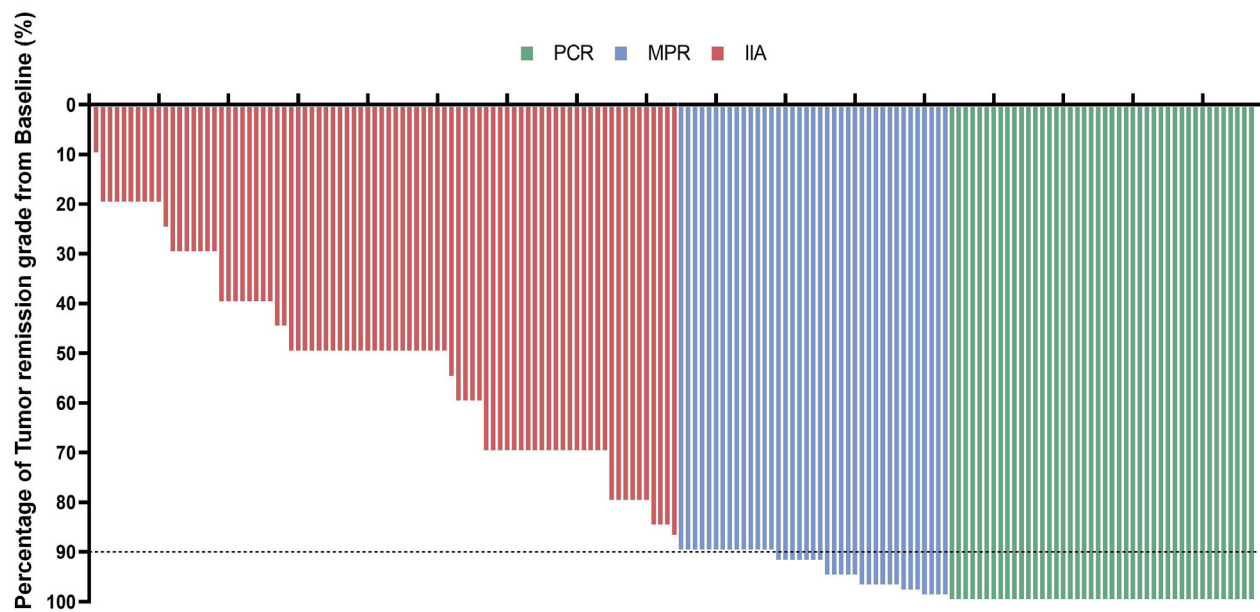


Figure S2 Postoperative pathological findings in patients with NSCLC receiving neoadjuvant treatment. MPR, major pathological response; PCR, pathologic complete response.

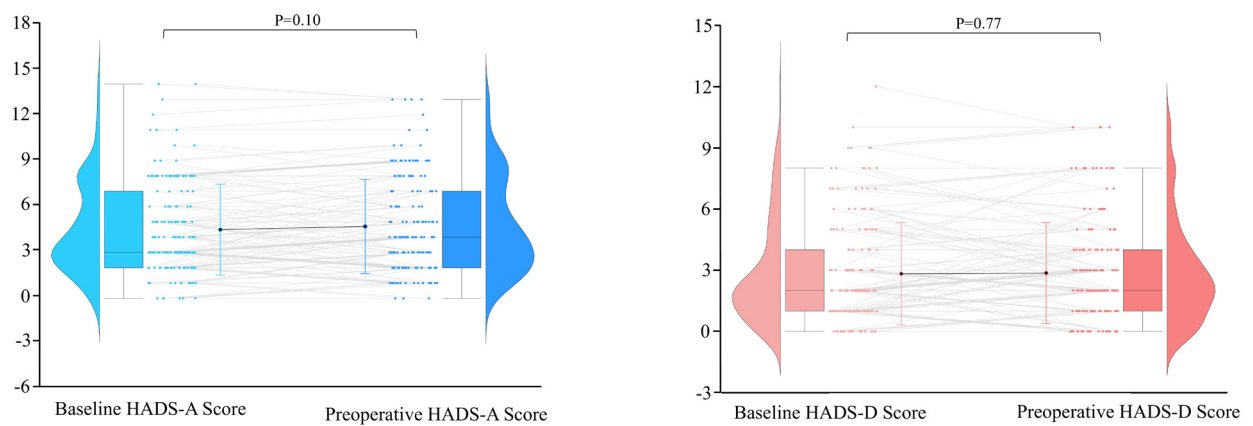


Figure S3 Changes between baseline HADS-Anxiety and Depression scores and preoperative scores.

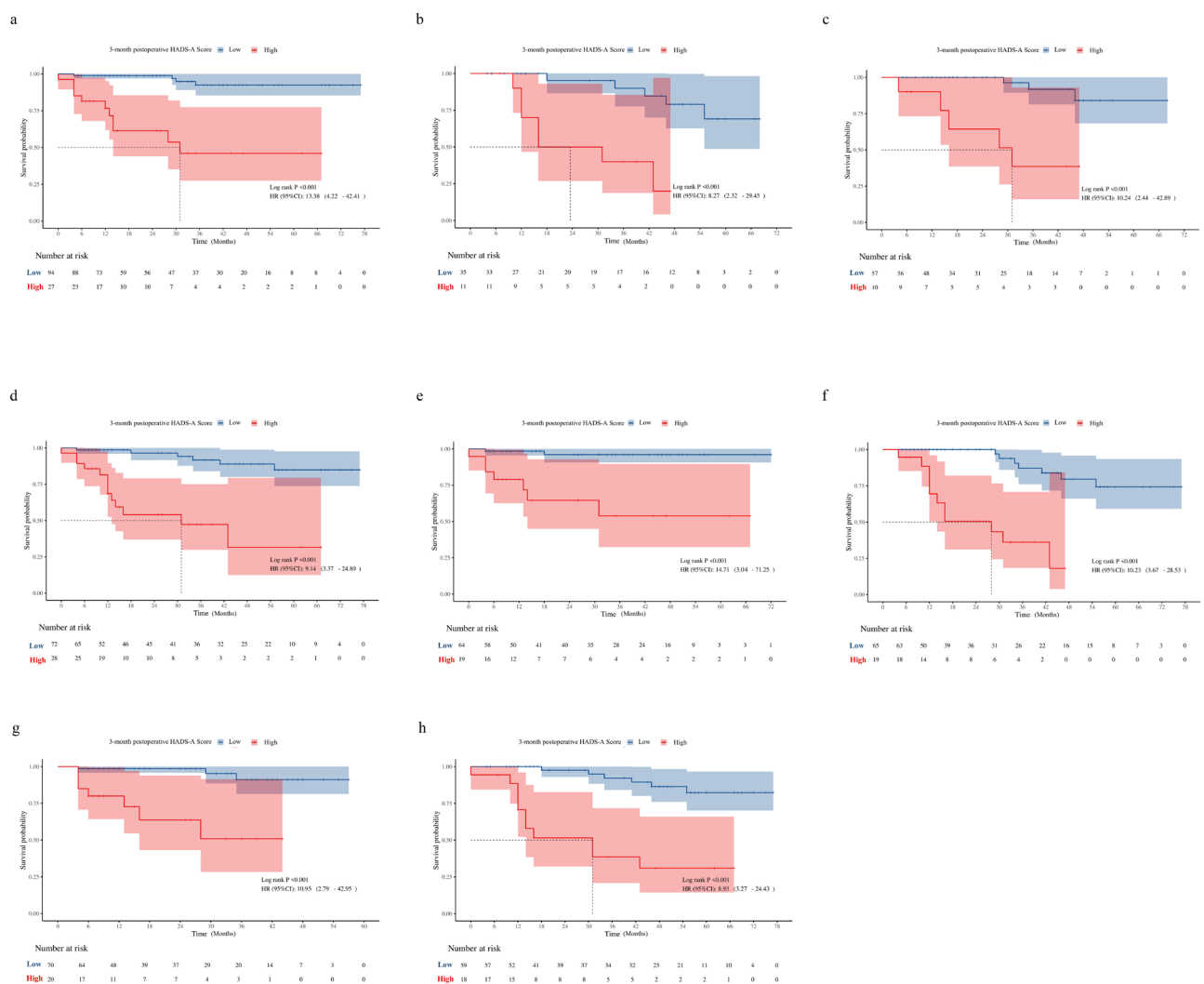


Figure S4 Kaplan-Meier curves stratified by HADS-defined risk at 3-month postoperative timepoint in different subgroups (two-sided log-rank tests). Relationships between different subgroups of patients who had received neoadjuvant therapy [histological type LUSC versus no-LUSC (A,B), age <65 versus ≥65 years (C,D), tumor remission grade PCR/MPR versus non-OR (E,F), neoadjuvant therapy comprising chemo-immunotherapy versus only chemotherapy (G,H)] and survival benefit in different strata of HADS risk groups (risk low and high). P values were calculated using a two-sided log-rank test. The HR and the corresponding 95% CI were calculated using a Cox proportional-hazards regression. A, Hospital Anxiety and Depression Scale for anxiety; D, Hospital Anxiety and Depression Scale for depression.