

Table S1 Univariate and multivariate analysis for OS

Variables	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Gender				
Female				
Male	1.41 (0.55–3.61)	0.473		
Age				
≤70 years				
>70 years	2.47 (1.30–4.70)	0.006*		
BMI				
≤23.77 kg/m ²				
>23.77 kg/m ²	0.21 (0.08–0.54)	0.001*	0.23 (0.09–0.60)	0.003*
Smoking status				
Never				
Current	1.30 (0.49–3.47)	0.599		
Former	1.46 (0.66–3.24)	0.348		
Liver metastasis				
No				
Yes	1.3 (0.57–2.95)	0.537		
Brain metastasis				
No				
Yes	0.72 (0.34–1.5)	0.377		
Bone metastasis				
No				
Yes	0.88 (0.47–1.65)	0.701		
ECOG PS				
0 or 1				
≥2	5.04 (2.45–10.36)	0.002*	4.75 (2.07–10.89)	<0.001*
Histology				
Adenocarcinoma				
Squamous	0.67 (0.34–1.32)	0.248		
Other NSCLC	1.34 (0.18–9.91)	0.774		
Mutation type				
No				
<i>EGFR</i>	0.33 (0.05–2.46)	0.282		
<i>KRAS</i>	2.02 (0.92–4.47)	0.081		
Other	1.69 (0.65–4.41)	0.281		
Clinical stage				
IVA				
IVB	0.48 (0.24–0.96)	0.037*		
Line of treatment				
1				
≥2	1.49 (0.81–2.76)	0.200		
ICI drug				
Pembrolizumab				
Camrelizumab	1.86 (0.63–5.51)	0.265		
Tislelizumab	0.50 (0.12–2.14)	0.352		
Sintilimab	0.81 (0.38–1.70)	0.572		
Nivolumab	1.16 (0.40–3.38)	0.787		

Table S1 (continued)

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Variables	Univariate analysis		Multivariate analysis	
	HR (95% CI)	P value	HR (95% CI)	P value
Mono or combo therapy				
Mono therapy				
Combo therapy	0.49 (0.24–1.01)	0.053		
irAEs				
No				
Yes	0.68 (0.32–1.48)	0.332		
PD-L1 TPS%				
<1%				
1–49%	0.77 (0.37–1.61)	0.487		
≥50%	1.00 (0.45–2.24)	0.99		
ACCI				
≤8				
>8	3.71 (1.55–8.88)	0.003*	3.82 (1.54–9.47)	0.004*
LDH				
≤222 U/L				
>222 U/L	2.66 (1.37–5.13)	0.004*	2.46 (1.22–4.97)	0.012*
Laboratory parameters				
Alb (g/L)	1.01 (0.95–1.06)	0.829		
ANC (×10 ⁹ /L)	1.29 (1.06–1.56)	0.010*	1.27 (1.07–1.51)	0.007*
PLT (×10 ⁹ /L)	1.00 (1.00–1.01)	0.434		
WBC (×10 ⁹ /L)	1.18 (1.01–1.39)	0.043*		
AMC (×10 ⁹ /L)	1.71 (0.23–12.77)	0.603		
ProGRP (pg/mL)	0.96 (0.93–0.99)	0.019*		
ALC (×10 ⁹ /L)	0.96 (0.55–1.66)	0.878		
AEC (×10 ⁹ /L)	9.26 (0.45–192.45)	0.150		
LMR	0.96 (0.76–1.23)	0.763		
NLR	1.10 (1.01–1.20)	0.118		
dNLR	1.15 (0.94–1.41)	0.166		
ALI	1.00 (1.00–1.00)	0.116		
PLR	1.00 (1.00–1.00)	0.748		
CEA (ng/mL)	0.99 (0.95–1.02)	0.445		
CYFRA21-1 (ng/mL)	0.98 (0.95–1.01)	0.144		
SCC (ng/mL)	0.97 (0.84–1.11)	0.658		
NSE (ng/mL)	0.98 (0.94–1.02)	0.314		
IL-6 (pg/mL)	1.04 (1.01–1.06)	0.001*		
PCT (ng/mL)	0.59 (0.01–43.39)	0.812		

*, P<0.05. OS, overall survival; HR, hazard ratio; CI, confidence interval; BMI, body mass index; ECOG PS, Eastern Cooperative Oncology Group performance status; NSCLC, non-small cell lung cancer; *EGFR*, endothelial growth factor receptor; *KRAS*, Kirsten rat sarcoma viral oncogene homolog; ICI, immune checkpoint inhibitor; irAEs, immune-related adverse effects; PD-L1, programmed death legend-1; TPS, total point score; ACCI, age-adjusted Charlson comorbidity index; LDH, lactate dehydrogenase; Alb, albumin; ANC, absolute neutrophil count; PLT, platelet; WBC, white blood cell; AMC, absolute monocyte count; proGRP, progastrin-releasing peptide; ALC, absolute lymphocyte count; AEC, absolute eosinophil count; LMR, lymphocyte-to-monocyte ratio; NLR, neutrophil-to-lymphocyte ratio; dNLR, derived NLR; ALI, advanced lung cancer inflammatory index; PLR, platelet-to-lymphocyte ratio; CEA, carcinoembryonic antigen; CYFRA21-1, cytokeratin fragment antigen 21-1; SCC, squamous cell carcinoma antigen; NSE, neuron-specific enolase; IL-6, interleukin-6; PCT, procalcitonin.