

Supplemental Table 1. Cox proportional-hazards regression: multivariable analysis

Variable	PFS		OS	
	HR [95% CI]	p-value	HR [95% CI]	p-value
Overweight	1.21 [0.96, 1.52]	0.10	1.00 [0.75, 1.33]	0.97
Obese	1.08 [0.83, 1.42]	0.56	0.87 [0.61, 1.25]	0.45
Low PNI	1.39 [1.10, 1.75]	0.01	1.63 [1.26, 2.12]	<0.001
ECOG grade	1.50 [1.28, 1.76]	<0.001	1.88 [1.56, 2.26]	<0.001
Stage	1.27 [0.95, 1.69]	0.11	1.27 [0.87, 1.85]	0.22
Age	0.99 [0.98, 0.99]	0.001	0.99 [0.98, 1.00]	0.27
Sex (male)	1.11 [0.89, 1.38]	0.36	1.72 [1.27, 2.33]	<0.001
Treatment line	1.73 [1.36, 2.19]	<0.001	1.56 [1.17, 2.10]	0.003
ICI plus chemotherapy (ref: ICI alone)	1.05 [0.81, 1.35]	0.71	1.08 [0.79, 1.48]	0.63
Anti-CTLA-4 plus anti-PD-1 (ref: anti-CTLA-4)	0.45 [0.31, 0.65]	<0.001	0.39 [0.25, 0.62]	<0.001
Anti-PD-1 or anti-PD-L1 (ref: anti-CTLA-4)	0.35 [0.24, 0.50]	<0.001	0.34 [0.22, 0.52]	<0.001

Supplemental Table 2. Patients with stage IV disease (n = 543)

Variable	PFS		OS	
	HR [95% CI]	p-value	HR [95% CI]	p-value
Overweight	1.16 [0.91, 1.48]	0.24	0.99 [0.73, 1.34]	0.95
Obese	1.11 [0.83, 1.47]	0.49	0.89 [0.60, 1.31]	0.54

Supplemental Table 3. Patients with lung cancer (n = 128)

Variable	PFS		OS	
	HR [95% CI]	p-value	HR [95% CI]	p-value
Overweight	1.29 [0.79, 2.10]	0.31	1.00 [0.57, 1.74]	0.99
Obese	1.24 [0.70, 2.20]	0.47	1.13 [0.54, 2.35]	0.74