

**Supplementary Table 4. Multivariate analysis of overall survival after the administration of immune checkpoint inhibitor considering four different PD-L1 status**

Parameter	Univariate analysis			Multivariate analysis		
	HR	CI	p value	HR	CI	p value
Age	0.99	0.96–1.03	0.681	1.04	0.99–1.10	0.117
Sex (female as reference)	0.40	0.19–0.82	0.013 <sup>a</sup>	4.22	0.37–47.6	0.244
Smoking status (never smoker as reference)						
Current/former smokers	0.40	0.19–0.83	0.014 <sup>a</sup>	0.07	0.01–0.79	0.032 <sup>a</sup>
Histologic subtype (adenocarcinoma as reference)			0.163			0.092
Squamous	0.76	0.34–1.66	0.484	1.73	0.54–5.50	0.356
Others	0.31	0.09–1.06	0.061	0.30	0.08–1.11	0.070
EGFR mutation (absent as reference)	2.24	1.05–4.79	0.038 <sup>a</sup>	2.42	0.78–7.47	0.125
No. of prior chemotherapy regimen (1 or 2 as reference)						
3 or more	2.22	1.09–4.53	0.029 <sup>a</sup>	1.38	0.47–4.01	0.555
ECOG (0 or 1 as reference)						
ECOG 2 or more	2.72	1.36–5.53	0.006 <sup>a</sup>	2.42	0.94–6.27	0.068
PD-L1 classification (PD-L1 (-/-) as reference)			0.160			0.179
PD-L1 (-/+)	0.51	0.19–1.38	0.185	0.30	0.09–1.04	0.057
PD-L1 (+/-)	0.28	0.08–1.02	0.054	0.20	0.03–1.21	0.080
PD-L1 (+/+)	0.45	0.19–1.07	0.071	0.33	0.10–1.09	0.069

PD-L1, programmed death-ligand 1; HR, hazard ratio; CI, confidence interval; EGFR, epidermal growth factor receptor; ECOG, Eastern Cooperative Oncology Group.

<sup>a</sup>p < 0.05.