

**Supplementary Table 6:**

Results of multivariate COX proportional hazards regression analyses for recurrence-free survival of ePD-L1 (n = 313).

	Pre-operative		Post-operative		Change	
	HR (95% CI)	P Value	HR (95% CI)	P Value	HR (95% CI)	P Value
Sex (Male)	1.046 (0.655-1.671)	0.850	1.435 (0.891-2.311)	0.138	1.204 (0.752-1.927)	0.441
Age ( $\geq$ 60 years)	1.527 (0.977-2.386)	0.063	1.697 (1.094-2.634)	0.018	1.244 (0.799-1.939)	0.334
BMI ( $\geq$ 25Kg/cm $^2$ )	0.648 (0.362-1.160)	0.145	0.828 (0.460-1.489)	0.528	0.553 (0.313-0.979)	0.042
Undifferentiated type	1.498 (0.953-2.356)	0.080	1.775 (1.141-2.763)	0.011	1.463 (0.915-2.341)	0.112
Borrmann typing (III & IV)	1.932 (1.093-3.417)	0.023	2.041 (1.152-3.614)	0.014	2.148 (1.188-3.884)	0.011
TNM stage (stage 3-4)	4.453 (2.695-7.358)	<0.001	3.136 (1.848-5.321)	<0.001	5.848 (3.448-9.916)	<0.001
Concomitant disease	0.584 (0.355-0.960)	0.034	0.688 (0.424-1.116)	0.130	0.530 (0.318-0.884)	0.015
Lymphadenectomy ( $\geq$ D2)	0.514 (0.333-0.792)	0.003	0.394 (0.249-0.622)	<0.001	0.563 (0.364-0.872)	0.010
Adjuvant chemotherapy	0.419 (0.264-0.665)	<0.001	0.437 (0.278-0.688)	<0.001	0.321 (0.199-0.517)	<0.001
ePD-L1 (pg/mL)	1.018 (0.995-1.042)	0.119	1.137 (1.103-1.172)	<0.001	0.921 (0.890-0.954)	<0.001