

**Supplementary Table 8:**

Results of multivariate COX proportional hazards regression analyses for recurrence-free survival of tPD-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)	1.029 (0.644- 1.645)	0.903	1.301 (0.811- 2.086)	0.275	1.106 (0.690- 1.771)	0.676
Age ( $\geq$ 60 years)	1.496 (0.967- 2.313)	0.070	1.689 (1.091- 2.617)	0.019	1.391 (0.897- 2.157)	0.141
BMI ( $\geq$ 25Kg/cm $^2$ )	0.640 (0.360- 1.137)	0.128	0.697 (0.393- 1.237)	0.218	0.601 (0.339- 1.067)	0.082
Undifferentiated type	1.507 (0.959- 2.369)	0.075	1.501 (0.961- 2.343)	0.074	1.402 (0.885- 2.220)	0.150
Borrmann typing (III & IV)	1.973 (1.119- 3.476)	0.019	1.945 (1.111- 3.405)	0.020	2.012 (1.128- 3.590)	0.018
TNM stage (stage 3-4)	4.497 (2.751- 7.350)	<0.001	4.742 (2.856- 7.875)	<0.001	5.275 (3.161- 8.800)	<0.001
Concomitant disease	0.609 (0.369- 1.007)	0.053	0.516 (0.317- 0.841)	0.008	0.509 (0.305- 0.849)	0.010
Lymphadenectomy ( $\geq$ D2)	0.544 (0.352- 0.839)	0.006	0.511 (0.332- 0.787)	0.002	0.511 (0.333- 0.785)	0.002
Adjuvant chemotherapy	0.425 (0.268- 0.675)	<0.001	0.350 (0.222- 0.551)	<0.001	0.359 (0.225- 0.572)	<0.001
tPD-L1 (pg/mL)	1.017 (1.001- 1.033)	0.033	1.085 (1.061- 1.110)	<0.001	0.982 (0.965- 0.999)	0.037