

**Supplementary Table 3. Univariate and multivariate analysis of prognostic factors associated with overall survival and recurrence-free survival in the validation cohort.**

Variables	Overall survival			Recurrence-free survival		
	Univariate <i>P</i> value	Multivariate <i>P</i> value	Multivariate HR (95% CI)	Univariate <i>P</i> value	Multivariate <i>P</i> value	Multivariate HR (95% CI)
<b>Gender</b>						
Male/Female	0.936	NA		0.380		
<b>Age (years)</b>						
<65/≥65	0.313	NA		<b>0.021</b>	<b>0.028</b>	5.087 (1.188-21.790)
<b>Primary site</b>						
Head/Body or tail	0.566	NA		0.491		
<b>Differentiation</b>						
I/II/III	0.111	NA		0.109		
<b>T stage</b>						
T1+T2/ T3+T4	0.183	NA		0.843		
<b>N stage</b>						
N0/N1-2	0.178	NA		0.163		
<b>TNM stage</b>						
I/II/III	0.342	NA		0.291		
<b>Perineural invasion</b>						
No/Yes	0.232	NA		<b>0.046</b>	0.270	3.624 (0.368-35.679)
<b>CA19-9</b>						
< 37/ ≥ 37 U/L	0.410	NA		0.748		
<b>CEA</b>						
< 5/ ≥ 5 ng/mL	0.701	NA		0.352		
<b>TBIL</b>						

≤ 20.4/ > 20.4 μmol/L	0.394	NA		0.125		
<b>Albumin</b>						
< 35/ ≥ 35 g/L	0.249	NA		0.666		
<b>ALT</b>						
≤ 35/ > 35 U/L	0.628	NA		0.613		
<b>AST</b>						
≤ 40/ > 40 U/L	0.798	NA		0.831		
<b>GGT</b>						
≤ 60/ > 60 U/L	0.577	NA		0.822		
<b>Glucose</b>						
≤ 5.6/ > 5.6 mmol/L	0.145	NA		0.315		
<b>Tumor-associated N1 neutrophils</b>						
Low/ High	<b>0.002</b>	0.152	0.280 (0.049-1.600)	<b>0.017</b>	0.139	0.272 (0.049-1.526)
<b>Tumor-associated N2 neutrophils</b>						
Low/ High	<b>&lt;0.001</b>	<b>0.019</b>	8.796 (1.430-54.116)	<b>&lt;0.001</b>	<b>0.036</b>	7.939 (1.148-54.888)
<b>Tumor-infiltrating Tregs</b>						
Low/High	<b>0.083</b>	0.857	0.839 (0.125-5.657)	<b>0.008</b>	0.161	2.689 (0.674-10.718)
<b>Tumor-infiltrating CD8+ T cells</b>						
Low/High	0.125	NA		<b>0.011</b>	0.327	2.215 (0.452-10.868)