

**Supplementary Table S1.** Logistic regression analysis of perioperative prognostic factors associated with 1-year mortality.

	Univariate			Multivariate		
	OR	95% CI	p-value	OR	95% CI	p-value
Age (years)	1.01	0.98-1.05	0.450			
Albumin (g/dL)	0.90	0.47-1.71	0.742			
Total bilirubin (mg/dL)	1.13	0.93-1.38	0.214			
Prothrombin time (min)	13.71	0.84-223.98	0.066			
Quartile of ΔCA19-9			0.688			
Q1	<i>Ref</i>					
Q2	1.16	0.40-3.37	0.786			
Q3	1.00	0.34-2.97	1.000			
Q4	1.70	0.61-4.72	0.308			
Tumor marker group			<0.001			0.009
Low preop / Low postop CA19-9	<i>Ref</i>			<i>Ref</i>		
High preop / Low postop CA19-9	1.71	0.59-4.95	0.319	2.49	0.62-9.97	0.199
Low preop / High postop CA19-9	2.80	1.30-6.03	<b>0.008</b>	4.76	1.42-16.02	<b>0.012</b>
High preop / High postop CA19-9	4.83	2.26-10.30	<0.001	6.62	2.10-20.83	<b>0.001</b>
CA19-9 status						
Normal preoperative CA19-9	<i>Ref</i>					
Normalization	1.14	0.52-2.49	0.741			
Non-normalization	4.25	2.04-8.86	<0.001			
Portal vein resection	2.27	1.14-4.52	<b>0.019</b>			
Intraoperative transfusion	2.06	1.16-3.67	<b>0.014</b>	2.28	0.98-5.30	0.057
R1 resection	1.90	1.07-3.36	<b>0.030</b>			
Size (cm)	1.12	0.95-1.31	0.177			
Portal vein invasion	2.35	1.18-4.68	<b>0.015</b>			
Lymphovascular invasion	2.45	1.34-4.46	<b>0.003</b>			
Perineural invasion	1.89	0.77-4.65	0.168			
LN metastasis	3.39	1.87-6.13	<0.001	3.58	1.46-8.78	<b>0.005</b>
T stage (T3,4 vs. T1,2)	3.31	1.84-5.97	<0.001	3.08	1.30-7.30	<b>0.011</b>
Adjuvant chemotherapy	0.57	0.31-1.05	0.072	0.42	0.17-1.05	0.062
Adjuvant radiotherapy	0.77	0.37-1.62	0.490			