Supplementary Table 1. Univariate and multivariate analysis of prognostic factors of overall survival: a subgroup analysis of patients with intrahepatic cholangiocarcinoma

Variable	n	Univariate Analysis		Multivariate Analysis	
		HR (95% CI)	P-value	HR (95% CI)	P-value
Age					
< 65	73	1.00			
≥ 65	51	1.25 (0.86-1.82)	0.240		
Sex					
Male	91	1.00			
Female	33	1.06 (0.69-1.61)	0.802		
Obesity[a]					
No	93	1.00			
Yes	31	1.08 (0.71-1.64)	0.718		
Charlson comorbidity index score					
<3	76	1.00			
≥3	48	1.32 (0.90-1.92)	0.155		
ECOG Performance status			0.574		
0	20	1.00			
1	95	1.30 (0.78-2.17)	0.313		
2	9	1.39 (0.62-3.10)	0.429		
Total bilirubin, mg/dL					
≤ 1.5	107	1.00			
> 1.5	17	1.03 (0.61-1.72)	0.918		
Carbohydrate antigen 19-9					
≤ 300	59	1.00			
> 300	65	1.18 (0.82-1.71)	0.374		
Carcinoembryonic antigen					
≤ 5	80	1.00			
> 5	44	1.27 (0.86-1.85)	0.226		
Prothrombin time, %					
≥ 80	107	1.00			
< 80	17	1.68 (0.997-2.83)	0.051		
C-reactive protein, mg/dL					
≤ 2.5	58	1.00			
> 2.5	66	1.30 (0.90-1.87)	0.164		
Stage[b] of cholangiocarcinoma					
III	16	1.00			
IV	108	0.82 (0.48-1.42)	0.479		
Disease status					
Locally advanced	25	1.00			
Metastatic	99	0.87 (0.55-1.36)	0.534		
Chemotherapy regimen					
Gemcitabine-based	97	1.00			
5-fluorouracil-based	27	1.03 (0.67-1.59)	0.896		
Neutrophil-lymphocyte ratio					
≤ 5	88	1.00		1.00	
> 5	36	2.28 (1.50-3.46)	**< 0.001**	1.97 (1.30-2.99)	**0.002**
Cholecystitis / cholangitis					
No	113	1.00			
Yes	11	1.18 (0.63-2.21)	0.602		
Biliary decompression					
No	77	1.00			
Yes	47	1.20 (0.82-1.75)	0.340		
Number of cycles of chemotherapy[c]		0.87 (0.83-0.91)	**< 0.001**	0.87 (0.83-0.92)	**< 0.001**

[a]Obesity was defined as a body mass index > 25 kg/m^2 according to the Asian-Pacific criteria for obesity.
[b]All tumors were staged according to the 7th edition of American Joint Committee on Cancer (AJCC) Classification System.
[c]continuously coded
ECOG, Eastern Cooperative Oncology Group; HR, hazard ratio; CI, confidence interval.

Supplementary Table 2. Univariate and multivariate survival analysis of possible prognostic factors including derived neutrophil-lymphocyte ratio

Variable	*n*	Univariate Analysis		Multivariate Analysis	
		HR (95% CI)	P-value	HR (95% CI)	P-value
Age					
< 65	128	1.00			
≥ 65	93	1.12 (0.84-1.49)	0.435		
Sex					
Male	153	1.00			
Female	68	1.06 (0.78-1.44)	0.706		
Obesity					
No	165	1.00			
Yes	56	1.10 (0.80-1.51)	0.579		
Charlson comorbidity index score					
<3	133	1.00			
≥3	88	1.03 (0.77-1.37)	0.887		
ECOG Performance status			0.238		
0	38	1.00			
1	168	1.39 (0.95-2.03)	0.090		
2	15	1.32 (0.71-2.47)	0.384		
Total bilirubin, mg/dL					
≤ 1.5	179	1.00			
> 1.5	42	0.91 (0.64-1.30)	0.617		
Carbohydrate antigen 19-9					
≤ 300	110	1.00		1.00	
> 300	111	1.57 (1.18-2.09)	**0.002**	1.50 (1.11-2.03)	**0.008**
Carcinoembryonic antigen					
≤ 5	146	1.00			
> 5	75	1.39 (1.03-1.86)	**0.030**		
Prothrombin time, %					
≥ 80	190	1.00			
< 80	31	1.30 (0.88-1.94)	0.190		
C-reactive protein, mg/dL					
≤ 2.5	114	1.00			
> 2.5	107	1.38 (1.05-1.83)	**0.023**		
Location of tumor			**0.001**		
Distal	26	1.00			
Perihilar	71	1.35 (0.81-2.24)	0.256		
Intrahepatic	124	2.13 (1.32-3.45)	**0.002**		
Stage of cholangiocarcinoma					
III	56	1.00		1.00	
IV	165	1.35 (0.97-1.89)	0.079	1.78 (1.24-2.53)	**0.002**
Disease status					
Locally advanced	84	1.00			
Metastatic	137	1.51 (1.12-2.02)	**0.007**		
Chemotherapy regimen					
Gemcitabine-based	179	1.00			
5-fluorouracil-based	42	1.30 (0.93-1.84)	0.130		
Derived neutrophil-lymphocyte ratio					
≤ 2	116	1.00		1.00	
> 2	105	1.55 (1.17-2.05)	**0.002**	1.44 (1.07-1.93)	**0.016**
Cholecystitis / cholangitis					
No	192	1.00			
Yes	29	0.93 (0.61-1.42)	0.750		
Biliary decompression					
No	102	1.00			
Yes	119	0.78 (0.59-1.03)	0.083		
Number of cycles of chemotherapy[a]		0.88 (0.85-0.91)	**< 0.001**	0.87 (0.83-0.89)	**< 0.001**

[a]continuously coded
ECOG, Eastern Cooperative Oncology Group; HR, hazard ratio; CI, confidence interval.