

Table S1. Predictors of death for patients with intermediate-stage HCC before third TACE.

Variable	Univariate analysis			Multivariate analysis		
	Hazard ratio	95% CI	<i>p</i> value	Hazard ratio	95% CI	<i>p</i> value
Before third TACE						
Age (yr) < 60/≥ 60	0.61	0.32-1.34	0.132			
Sex male/female	0.65	0.12-1.78	0.342			
HBsAg status positive/negative	0.34	0.24-0.89	0.230			
Child-Pugh class A/B	1.32	0.23-1.78	0.380			
Largest tumor size (cm) < 5/≥ 5	1.23	1.01-3.87	0.023	1.87	0.43-3.28	< 0.001
Tumor number ≤3/>3	1.30	1.01-2.89	0.012	1.87	1.02-3.98	< 0.001
AFP (IU/mL) < 200/≥ 200	0.62	0.21-1.03	0.098			
AST (U/L) < 40/≥ 40	0.54	0.27-0.94	0.081			
ALT(U/L) < 40/≥ 40	0.53	0.12-0.78	0.079			
ALB (g/L) < 35/≥ 35	1.32	0.76-2.89	0.032	1.45	1.11-1.67	0.067
Capsule absent/present	1.78	1.87-3.26	0.012	1.49	0.09-2.76	0.098
Up to seven criteria within/beyond	1.65	1.14-1.56	0.043	1.66	1.01-1.87	0.089
Pre-TACE-3 lipiodol deposition responder/non-reponder	1.46	0.78-3.88	0.019	1.42	0.45-3.88	< 0.001

BCLC: Barcelona Clinic Liver Cancer; HBsAg: Hepatitis B surface antigen; AST: Aspartate aminotransferase; ALT : Alanine transaminase; AFP: Alpha fetoprotein; ALB:Albumin.

Table S2. Predictors of death for patients with intermediate-stage HCC before fourth TACE.

Variable	Univariate analysis			Multivariate analysis		
	Hazard ratio	95% CI	<i>p</i> value	Hazard ratio	95% CI	<i>p</i> value
Before fourth TACE						
Age (yr) < 60/≥ 60	0.42	0.22-1.02	0.821			
Sex male/female	0.34	0.24-1.34	0.232			
HBsAg status positive/negative	0.44	0.12-0.34	0.451			
Child-Pugh class A/B	1.34	0.34-1.34	0.345			
Largest tumor size (cm) < 5/≥ 5	1.38	1.33-3.32	0.012	1.26	0.43-2.87	< 0.001
Tumor number ≤3/>3	1.34	1.34-3.34	0.023	1.45	1.02-3.36	< 0.001
AFP (IU/mL) < 200/≥ 200	0.64	0.23-1.456	0.032			
AST (U/L) < 40/≥ 40	0.32	0.12-0.76	0.104			
ALT(U/L) < 40/≥ 40	0.33	0.31-0.98	0.321			
ALB (g/L) < 35/≥ 35	1.23	0.34-2.78	0.045			
Capsule absent/present	1.34	1.32-3.24	0.078			
Up to seven criteria within/beyond	1.32	1.32-1.78	0.032	1.34	1.02-1.89	0.089
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Pre-TACE-4 lipiodol deposition responder/non-reponder	1.34	0.32-3.45	0.028	1.32	0.23-3.34	0.139

BCLC: Barcelona Clinic Liver Cancer; AST: Aspartate aminotransferase; ALT : Alanine transaminase;AFP: Alpha fetoprotein; ALB:Albumin.