

* no. of events / total no. (%)

Figure S1 Forest plot analysis of factors associated with PFS. SYS+αPD-(L)1, SYS plus αPD-(L)1 antibody; SYS, systemic chemotherapy; αPD-(L)1, anti-programmed death-(ligand) 1 immunotherapy; HAIC+αPD-(L)1, HAIC-FO plus αPD-(L)1 antibody; HAIC-FO, HAIC with infusional FOLFOX regimens; HAIC, hepatic arterial infusion chemotherapy; FOLFOX, fluorouracil, leucovorin, and oxaliplatin; HR, hazard ratio; CI, confidence interval; HBV, hepatitis B virus; CEA, carcinoembryonic antigen; CA19-9, carbohydrate antigen 19-9.

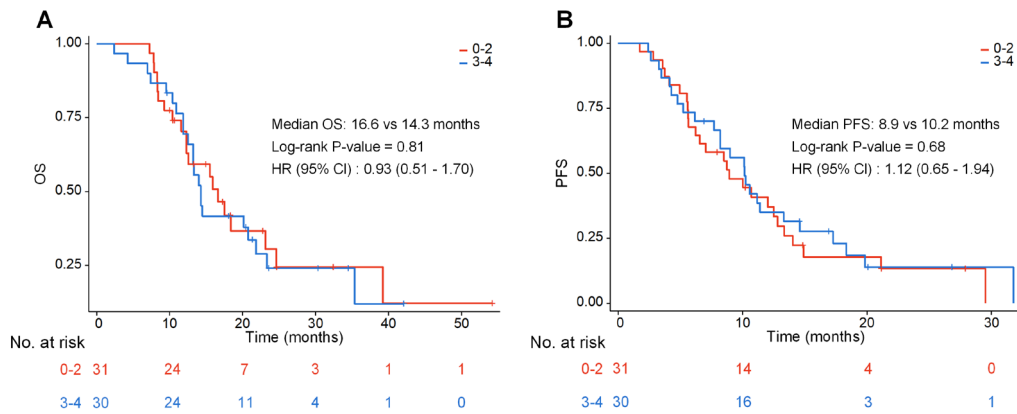


Figure S2 Kaplan-Meier survival analysis was conducted to assess the OS (A) and PFS (B) of uICC patients who experienced grade 0–2 and grade 3–4 AEs during HAIC plus α PD-(L)1 treatment as first-line treatments. OS, overall survival; HR, hazard ratio; CI, confidence interval; PFS, progression-free survival; uICC, unresectable intrahepatic cholangiocarcinoma; AEs, adverse events; HAIC, hepatic arterial infusion chemotherapy; α PD-(L)1, anti-programmed death-(ligand) 1 immunotherapy.

Table S1 The type of chemotherapy drug received by the SYS+ α PD-(L)1 group of patients

Variables	Before PSM (n=35)	After PSM (n=26)
Gemcitabine	1 (2.9)	0 (0.0)
Gemcitabine + cisplatin	23 (65.7)	19 (73.1)
Gemcitabine + capecitabine	3 (8.6)	2 (7.7)
Gemcitabine + oxaliplatin	1 (2.9)	0 (0.0)
Oxaliplatin + 5-FU	7 (20.0)	5 (19.2)

Data are presented as n (%). SYS+ α PD-(L)1, SYS plus α PD-(L)1 antibody; SYS, systemic chemotherapy; α PD-(L)1, anti-programmed death-(ligand) 1 immunotherapy; PSM, propensity score matching; 5-FU, 5-fluorouracil.

Table S2 The baseline metastatic status of the two groups of patients before and after PSM

Characteristics	Before PSM		After PSM	
	HAIC+ α PD-(L)1 (n=147)	SYS+ α PD-(L)1 (n=35)	HAIC+ α PD-(L)1 (n=61)	SYS+ α PD-(L)1 (n=26)
Lung	17 (11.6)	7 (20.0)	11 (18.0)	5 (19.2)
Peritoneum	8 (5.4)	9 (25.7)	4 (6.6)	3 (11.5)
Bone	11 (7.5)	8 (22.9)	8 (13.1)	4 (15.4)
Adrenal gland	5 (3.4)	3 (8.6)	4 (6.6)	2 (7.7)
diaphragm	1 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)
Pancreas	1 (0.7)	1 (2.9)	1 (1.6)	1 (3.8)

Data are presented as n (%). PSM, propensity score matching; HAIC+ α PD-(L)1, HAIC-FO plus α PD-(L)1 antibody; HAIC-FO, HAIC with infusional FOLFOX regimens; HAIC, hepatic arterial infusion chemotherapy; FOLFOX, fluorouracil, leucovorin, and oxaliplatin; α PD-(L)1, anti-programmed death-(ligand) 1 immunotherapy; SYS+ α PD-(L)1, SYS plus α PD-(L)1 antibody; SYS, systemic chemotherapy.

Table S3 The 1- and 2-year OS rates for the two groups before and after PSM

Characteristics	Before PSM		After PSM	
	HAIC+ α PD-(L)1 (n=147)	SYS+ α PD-(L)1 (n=35)	HAIC+ α PD-(L)1 (n=61)	SYS+ α PD-(L)1 (n=26)
1-year OS rate (95% CI), %	70.3 (63.2–78.1)	51.7 (37.1–71.9)	69.8 (59.0–82.5)	40.0 (24.7–64.6)
2-year OS rate (95% CI), %	33.8 (26.3–43.5)	13.7 (5.19–36.0)	27.3 (6.76–43.5)	17.1 (6.76–43.5)

OS, overall survival; PSM, propensity score matching; HAIC+ α PD-(L)1, HAIC-FO plus α PD-(L)1 antibody; HAIC-FO, HAIC with infusional FOLFOX regimens; HAIC, hepatic arterial infusion chemotherapy; FOLFOX, fluorouracil, leucovorin, and oxaliplatin; α PD-(L)1, anti-programmed death-(ligand) 1 immunotherapy; SYS+ α PD-(L)1, SYS plus α PD-(L)1 antibody; SYS, systemic chemotherapy; CI, confidence interval.

Table S4 The disease progression patterns of both groups before and after PSM

Variables	Before PSM			After PSM		
	HAIC+ α PD-(L)1 (n=147)	SYS+ α PD-(L)1 (n=35)	P value	HAIC+ α PD-(L)1 (n=61)	SYS+ α PD-(L)1 (n=26)	P value
Progression of the primary tumor	9 (6.1)	8 (22.9)	0.002*	3 (4.9)	7 (26.9)	0.003*
Newly developed intrahepatic lesions	23 (15.6)	6 (17.1)	0.83	11(18.0)	5 (19.2)	0.90
Progression of extrahepatic lesions	50 (34.0)	4 (11.4)	0.009*	18 (29.5)	3 (11.5)	0.07

*, P<0.05. PSM, propensity score matching; HAIC+ α PD-(L)1, HAIC-FO plus α PD-(L)1 antibody; HAIC-FO, HAIC with infusional FOLFOX regimens; HAIC, hepatic arterial infusion chemotherapy; FOLFOX, fluorouracil, leucovorin, and oxaliplatin; α PD-(L)1, anti-programmed death-(ligand) 1 immunotherapy; SYS+ α PD-(L)1, SYS plus α PD-(L)1 antibody; SYS, systemic chemotherapy.