Supplementary Table 1 Summary of neoadjuvant treatment regimens and treatment-related intervals in the neoadjuvant therapy group

Neoadjuvant regimen	Patients, n (%)	Main treatment components (Number of people)	Median number of treatment courses (IQR)	Median interval from last treatment to surgery, months (IQR)
Interventional therapy alone	12 (21.4)	TACE (9) TAE (3)	2 (1-2.25)	2 (1-3)
Targeted therapy + immunotherapy	7 (12.5)	Lenvatinib + Tislelizumab (4) Atezolizumab + bevacizumab (3)	7 (4-8.5)	1 (1-2.5)
Targeted therapy + immunotherapy + interventional therapy	14 (25.0)	Lenvatinib + Tislelizumab + TACE (5) Lenvatinib + Sintilimab + TACE (5) Lenvatinib + Toripalimab + HAIC (2) Lenvatinib +	4.5 (3.25-6.5)	1 (1-2)

			Camrelizumab + TACE (2)		
Targeted therapy + immunotherapy + radiotherapy		3 (5.4)	Lenvatinib + Sintilimab + VMAT	4 (2.5-4.5)	4 (2.5-4)
Targeted therapy + radiotherapy		9 (16.1)	Lenvatinib + VMAT	1 (1-2)	1 (1-2)
Targeted therapy + interventional therapy		8 (14.3)	Lenvatinib + TACE (5) Lenvatinib + TAE (2) Sorafenib + TACE (1)	2.5 (1-3)	3 (2-3)
Immunotherapy + radiotherapy		3 (5.4)	Sintilimab + VMAT (3)	3 (2.5-3.5)	4 (3-4.5)

IQR: Interquartile range; TACE: Transarterial chemoembolization; TAE: Transarterial embolization; HAIC: Hepatic arterial infusion chemotherapy; VMAT: Volumetric modulated arc therapy.

Supplementary Table 2 Adverse events

Variable	**Neoadjuvant therapy (n = 56)**	
	Any grade, n (%)	Grade ≥ 3, n (%)

Decreased appetite	5 (8.9)	2 (3.6)
Hypertension	6 (10.7)	1 (1.8)
Fatigue	9 (16.1)	1 (1.8)
Hand-foot skin reaction	6 (10.7)	2 (3.6)
Liver function abnormality	10 (17.9)	0 (0)
Bleeding	3 (5.4)	0 (0)
Rash	5 (8.9)	1 (1.8)
Proteinuria	2 (3.6)	0 (0)
Muscle pain	6 (10.7)	0 (0)
Dysphonia	5 (8.9)	0 (0)
Vomiting	4 (7.1)	1 (1.8)
Diarrhea	7 (12.5)	2 (3.6)
Treatment interruption	3 (5.4)	-
Hypothyroidism	3 (5.4)	1 (1.8)

-: Not applicable.