Supporting Table S1: Characteristics of tumors

Author Year	Group	Diameter, (cm)	Number, (%)	Capsule, (%)	Differentiation, (%)	AFP, (ng/mL)
Wang H	PA-TACE	3.84±1.27	Multiple: 44(100.0)	31 (70.5)	NR	357.00±444.12
2018	HA	3.83 ± 1.09	Multiple: 84(100.0)	50 (59.5)	NR	367.45±474.58
Ye JZ	PA-TACE	> 5: 45 (52.3%)	Single: 73(84.9)	51 (59.3)	Edmondson 1-2: 49 (57)	> 400: 37 (43.0)
2017	НА	> 5: 98 (56.3%)	Single: 137(78.7)	105 (60.3)	Edmondson 1-2: 91(52.3)	> 400: 85 (48.9)
Sun JJ	PA-TACE	6.511 ± 0.2682	Single: 126(92.0)	11 (8.0)	Edmondson 1-2: 13(9.5)	> 400: 58 (42.3)
2016	НА	6.993 ± 0.2898	Single: 168(90.8)	17 (9.2)	Edmondson 1-2: 10(5.4)	> 400: 91 (49.2)
Li KW	PA-TACE	> 5: 21(60%)	Single: 25 (71.4)	25(71.4)	Edmondson 1-2: 24(68.6)	≥ 400: 25 (71.4)
2012	НА	> 5: 26(63.4%)	Single: 29 (70.7)	28(68.3)	Edmondson 1-2: 30(73.2)	≥ 400: 27(65.9)
Wei W	PA-TACE	> 10: 34 (29.3%)	NR	NR	NR	≥ 25:79 (68.1)
2018	HA	> 10: 21 (17.8%)	NR	NR	NR	≥ 25: 82 (69.5)
Qi YP	PA-TACE	> 5: 71(88%)	Single: 68 (74.7)	59(64.8)	NR	≥ 400: 44(48.4)
2018	НА	> 5: 75(68.8%)	Single: 84 (77.1)	61(56.0)	NR	≥ 400: 50(45.9)
Wang YY	PA-TACE	6	Single: 46 (81)	NR	Edmondson 1-2: 41 (72)	≥ 200: 25 (44)
2018	HA	6	Single: 46 (81)	NR	Edmondson 1-2: 41 (72)	≥ 200: 23 (40)
Wang LM	PA-TACE	6.15 ± 3.65	Single: 38 (90.5)	NR	Edmondson 1-2: 25(59.5)	≥ 400: 17(40.5)
2017	НА	5.71 ± 2.60	Single: 46 (92)	NR	Edmondson 1-2: 32(64.0)	≥ 400: 18(36)

Abbreviations: AFP: Alpha Fetal Protein, PA-TACE: postoperative adjuvant transarterial chemoembolization, HA: hepatectomy alone, NR: not reported

Supporting Table S2: Modified Methodological Index for Non-Randomized Studies (MINORS) score for assessing the quality of all eligible nonrandomized comparative studies

Study (year)	Consecuti ve patients	Prospective data collection	Reported primary endpoints	Unbiased postproced ural evaluation	Appropriat e control interventio n	Contempor ary groups	Group equivalent	Sample size	Total score
Ye JZ (2017)	2	2	2	2	2	2	1	2	15
Wang H (2018)	2	2	2	2	2	2	2	1	15
Li KW (2012)	2	2	2	2	2	2	2	1	15
Qi YP (2018)	2	2	2	2	2	2	2	2	16
Sun JJ (2016)	2	2	2	2	2	2	1	2	15
Wang YY (2018)	2	2	2	2	2	2	2	2	16
Wang LM (2017)	2	2	2	2	2	2	2	1	15

Supporting Table S3: Risk of bias assessment using Cochrane Collaboration's tool in the randomized clinical trial study included in the meta-analysis: Wei W (2018)

Bias types	Bias explanations	Assessment results	
	The eligible patients were randomly assigned (at a 1:1 ratio)		
D. I.	to receive either 1–2 cycles of adjuvant TACE		
Random sequence generation	(Hepatectomy-TACE group) or routine follow-up without	Low risk of bias	
(selection bias)	adjuvant treatment (Hepatectomy Alone group).	Eow risk of olds	
	Randomization was performed using a sealed envelope		
	system according to a predesigned random number.		
Allocation concealment	The authors regarded that lack of allocation concealment had	Low risk of bias	
(selectionbias)	no influence on the results of the study.		
Blinding of participants and personnel	The authors regarded that lack of blinding of participants and		
(performance bias)	personnel had no influence on the results of the study.	Low risk of bias	
Blinding of outcome assessment	The authors regarded that lack of blinding of outcome	Low risk of bias	
(detection bias)	assessment had no influence on the results of the study.	LOW FISK OF DIAS	
Incomplete outcome data addressed	The withdrawal rates (4.0% vs. 3.2%) or follow-up loss rates		
(attrition bias)	1 (3.2% vs. 2.4%) were minimal and balanced between the two		
(attrition bias)	comparison groups.		
	All of the study's outcomes that are of interest in the review have been reported in the pre-specified manner. The study		
Selective reporting			
(reporting bias)	was registered in ClinicalTrials.gov (http://ClinicalTrials.gov,	ov, Low risk of bias	
	trial number NCT02788526) on March 23, 2016		

Supporting Table S4: Begg's and Egger's P values of the survival data

	Begg's P value	Egger's P value
1-year recurrence rate	0.711	0.303
3-year recurrence rate	0.711	0.893
5-year recurrence rate	0.462	0.811
1-year survival rate	0.711	0.631
3-year survival rate	0.711	0.958
5-year survival rate	1.000	0.894

The software used for statistical analysis: Stata (Version 14.0, Stata Corp LP, College Station, TX)

Supporting Table S5: Most common side effect of TACE

Author Year	Nausea and vomiting	Fever	Pain	Pulmonary complication	Other side effect
Wang H 2018	NR	NR	NR	NR	NR
Ye JZ 2017	46 (29.11)	35 (22.2)	49 (31.0)	2 (1.3)	Alopecia 5 (3.2)
Sun JJ 2016	130, 94.9 %	NR	32, 23.4 %	NR	Increase in ALT/ AST: 77, 56.2 %
Li KW 2012	NR	NR	NR	NR	NR
Wei W 2018	nausea/vomiting	Fever	NR	NR	Neutropenia, liver dysfunction
Qi YP 2018	NR	4, 4.4%	9, 9.9%	NR	Increase ALT and AST: 26, 28.6%
Wang YY 2018	NR	NR	NR	NR	NR
Wang LM 2017	NR	NR	NR	NR	NR

NR: not reported

Supporting Figure legend:

Supporting Fig. 1. Funnel plots of the survival analysis. a: 1-year DFS, b: 3-year DFS, c: 5-year DFS, d: 1-year OS, e: 3-year OS, f: 5-year OS. DFS: Disease free survival, OS: Overall survival.

Detail retrieval methods:

((((hepatectomy OR (hepatic resection) OR (liver resection))) AND ((transcatheter arterial chemoembolization) OR tace)) AND ((microvascular invasion) OR MVI OR mivi OR (microscopic venous invasion))) AND (HCC OR (hepatocellular carcinoma))