

Figure S1 Funnel plot of objective response rate (ORR) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

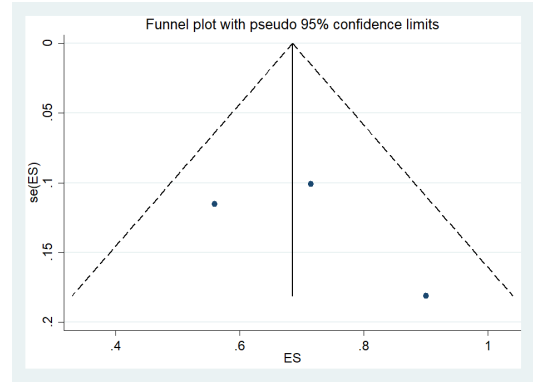


Figure S4 Funnel plot of 10-month overall survival (10-month OS) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

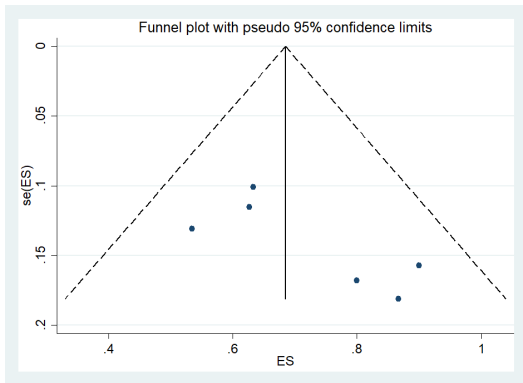


Figure S2 Funnel plot of disease control rate (DCR) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

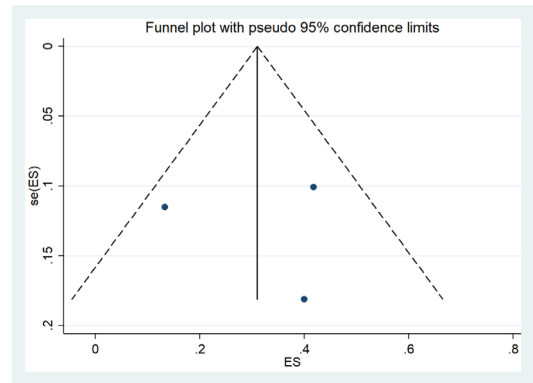


Figure S5 Funnel plot of 20-month overall survival (20-month OS) of TKIs-Sin-TACE. OS, overall survival; TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

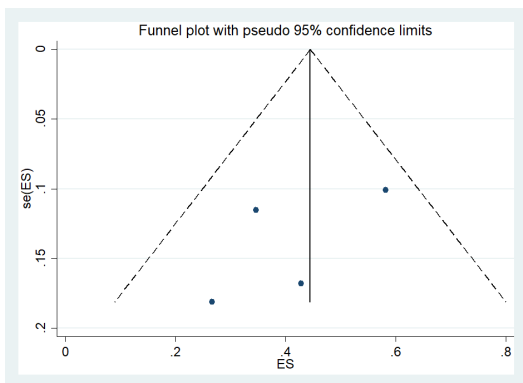


Figure S3 Funnel plot of 10-month progression-free survival (10-month PFS) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

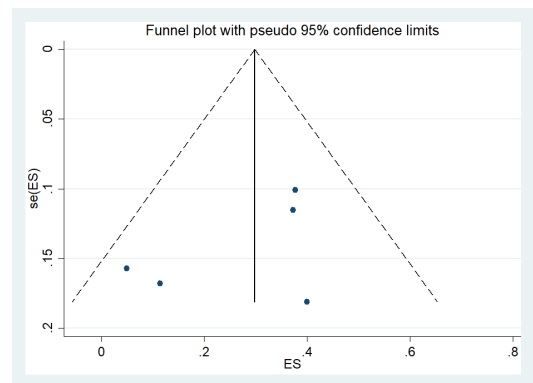


Figure S6 Funnel plot of treatment-related adverse events of grade ≥ 3 (TRAEs \geq Grade 3) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

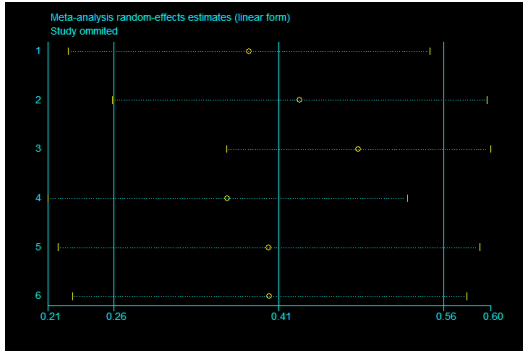


Figure S7 Sensitivity analysis in objective response rate (ORR) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

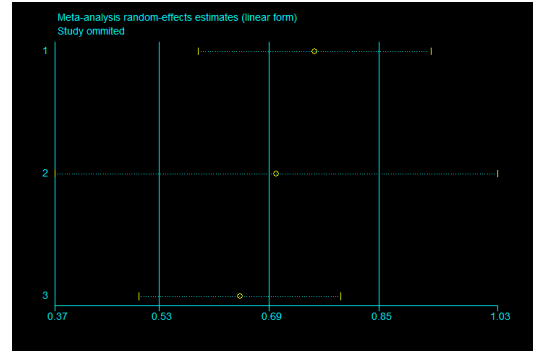


Figure S10 Sensitivity analysis in 10-month overall survival (10-month OS) of TKIs-Sin-TACE. OS, overall survival; TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

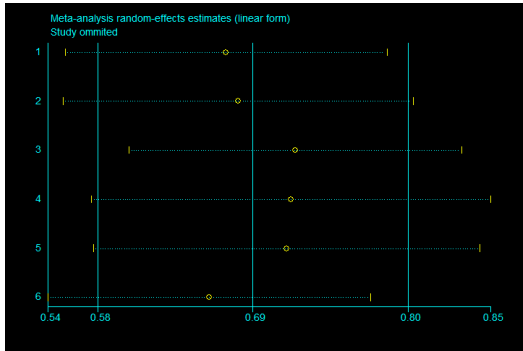


Figure S8 Sensitivity analysis in disease control rate (DCR) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

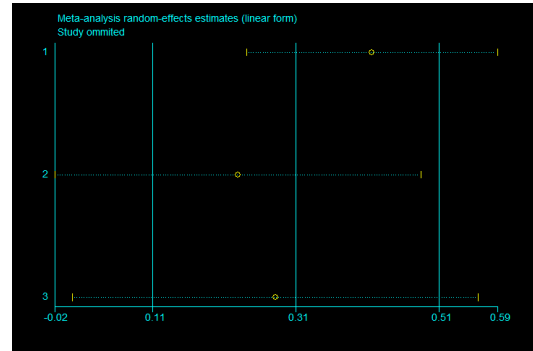


Figure S11 Sensitivity analysis in 20-month overall survival (20-month OS) of TKIs-Sin-TACE. OS, overall survival; TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

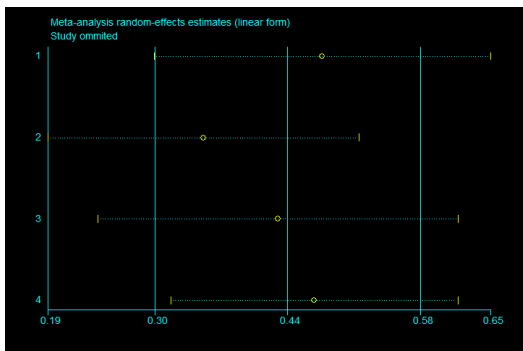


Figure S9 Sensitivity analysis in 10-month progression-free survival (10-month PFS) of TKIs-Sin-TACE. PFS, progression-free survival; TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

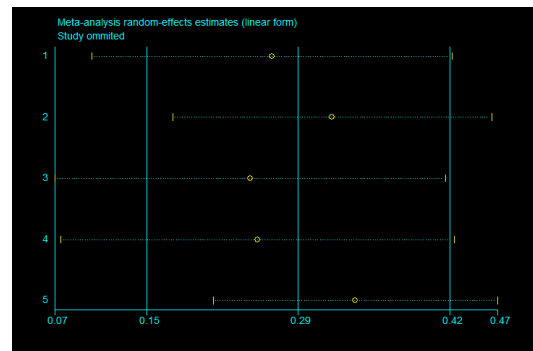


Figure S12 Sensitivity analysis in severe treatment-related adverse events (TRAEs \geq Grade 3) of TKIs-Sin-TACE. TKIs-Sin-TACE, tyrosine kinase inhibitors combined with sintilimab and transarterial chemoembolization.

Table S1 The result of MINORS for each study included

First author and year	1	2	3	4	5	6	7	8	9	10	11	12	Score
Cai, 2024 (7)	2	2	2	2	2	2	2	2	NA	NA	NA	NA	16
Dai, 2021 (8)	2	2	0	2	2	2	2	0	2	2	2	2	20
Ding, 2023 (9)	2	2	2	2	2	2	2	2	2	2	2	2	24
Gan, 2023 (10)	2	2	0	2	2	2	2	0	2	2	2	2	20
Lang, 2023 (11)	2	2	0	2	2	2	2	0	2	2	2	2	20
Sun, 2024 (12)	2	2	0	2	2	2	2	0	NA	NA	NA	NA	12

1, a clearly stated aim; 2, inclusion of consecutive patients; 3, prospective data collection; 4, endpoints suitable for the aim of the study; 5, unbiased assessment of the study endpoint; 6, appropriate follow-up period for the purpose of the study; 7, the rate of follow up $\geq 95\%$; 8, prospective calculation of the study size; 9, an adequate control group; 10, contemporary groups; 11, baseline equivalence of groups; 12, adequate statistical analyses; NA, not applicable; 9-12 suitable for comparative study. MINORS, Methodological Index for Non-Randomized Studies.