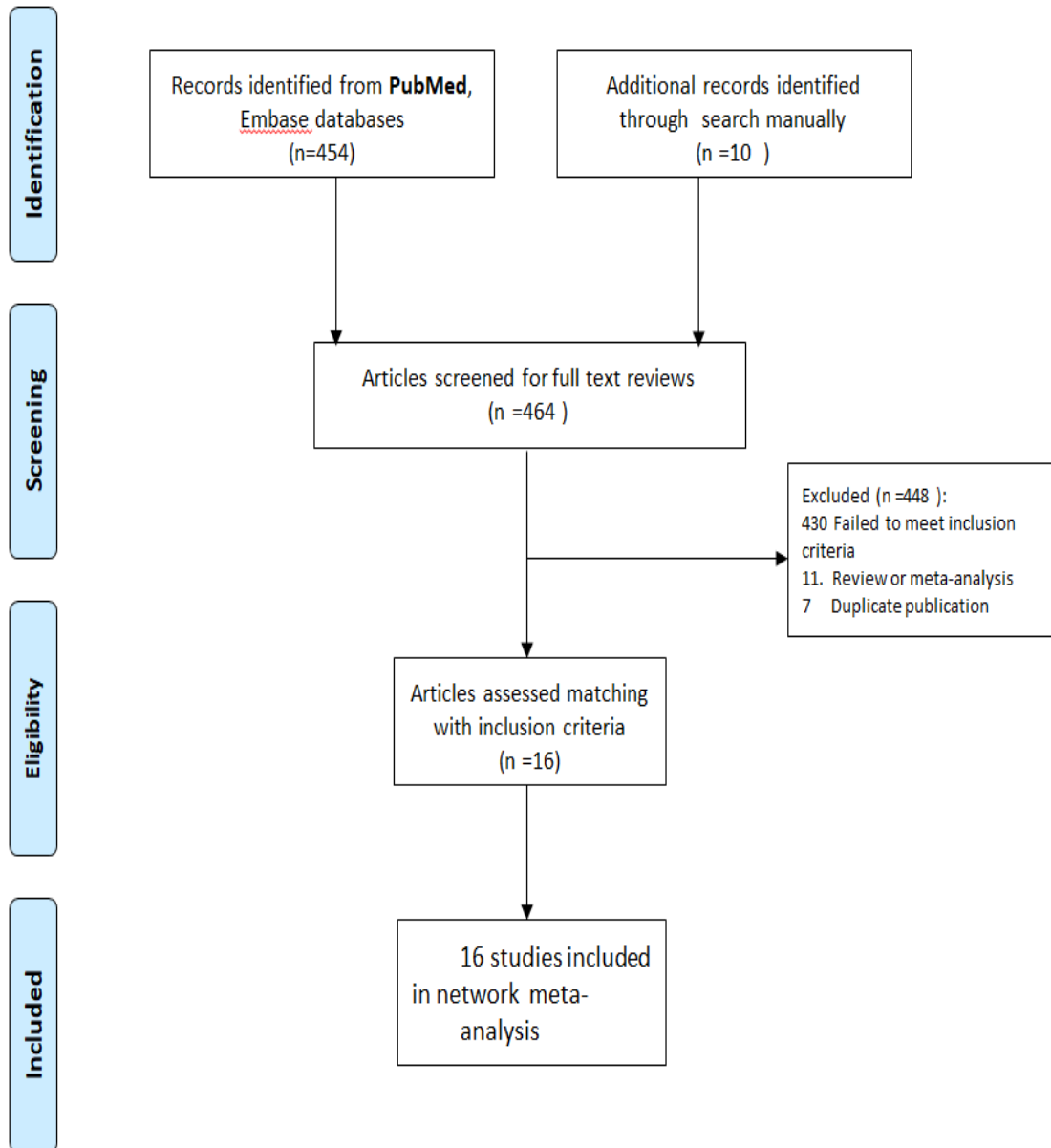
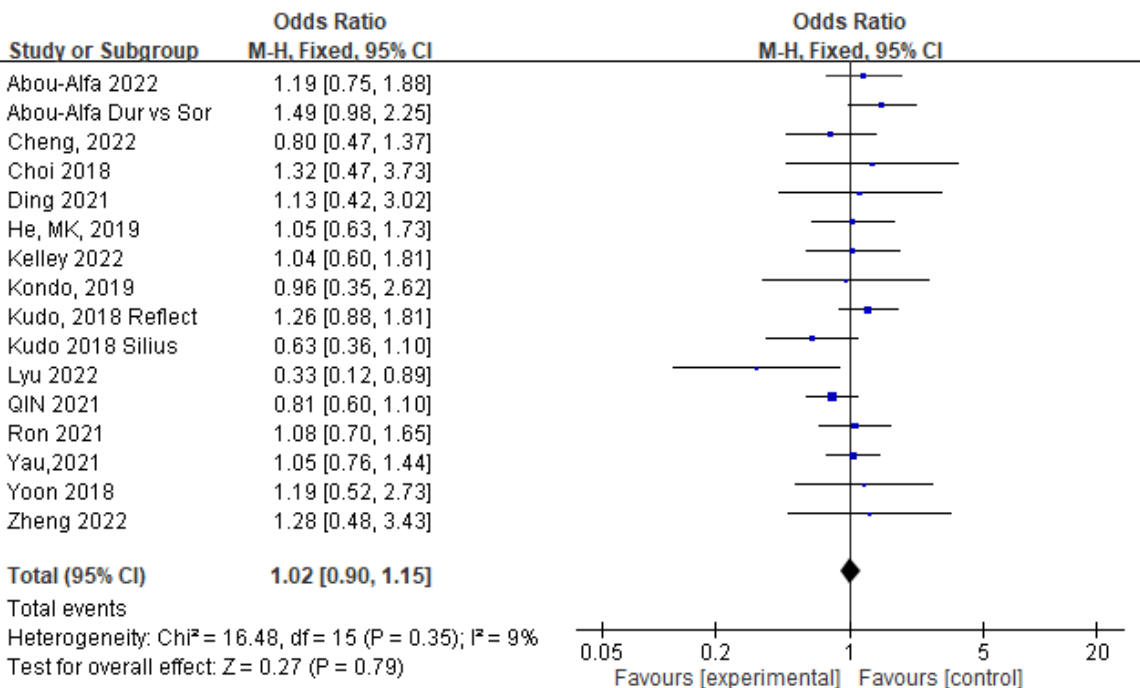


Supplementary Figure 1. Network map of randomized controlled trials comparing multimodality treatment for aHCC with PVTT

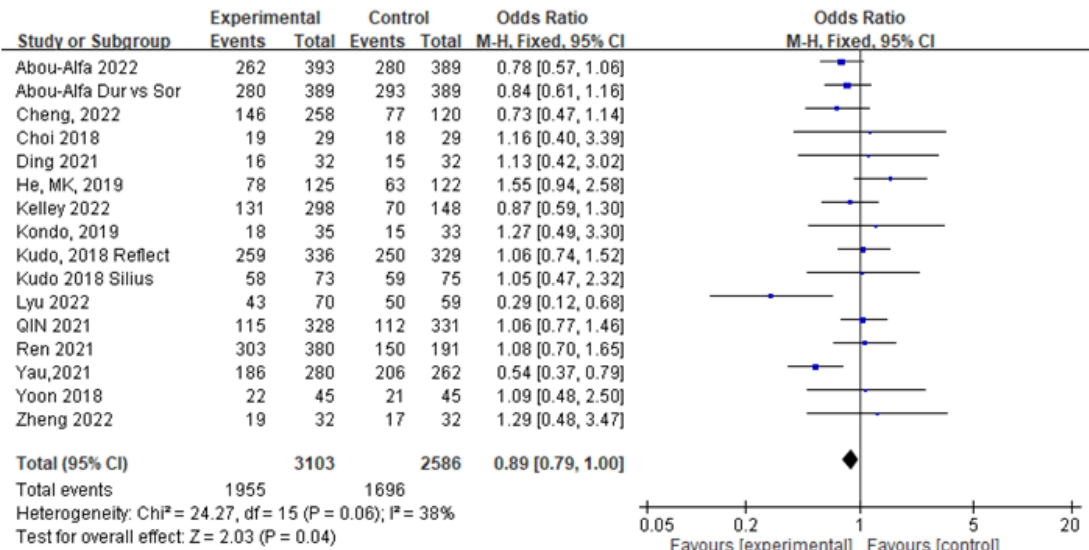


Supplementary Figure 2 The flow chart summarizing the process for the identification of the eligible clinical studies

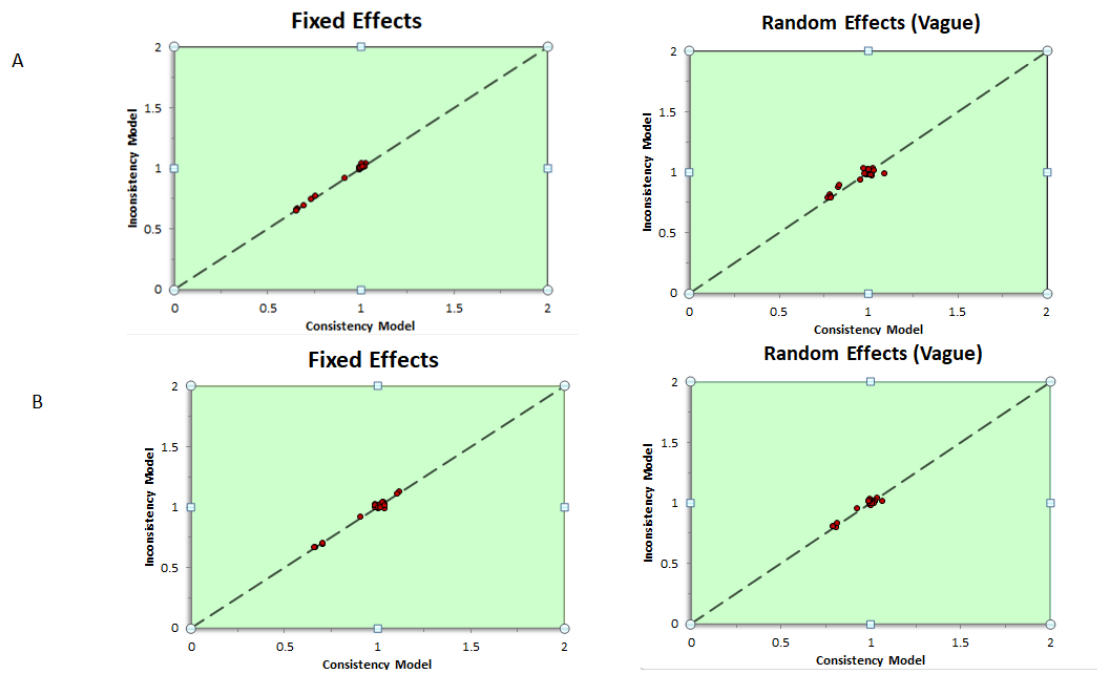
(A)



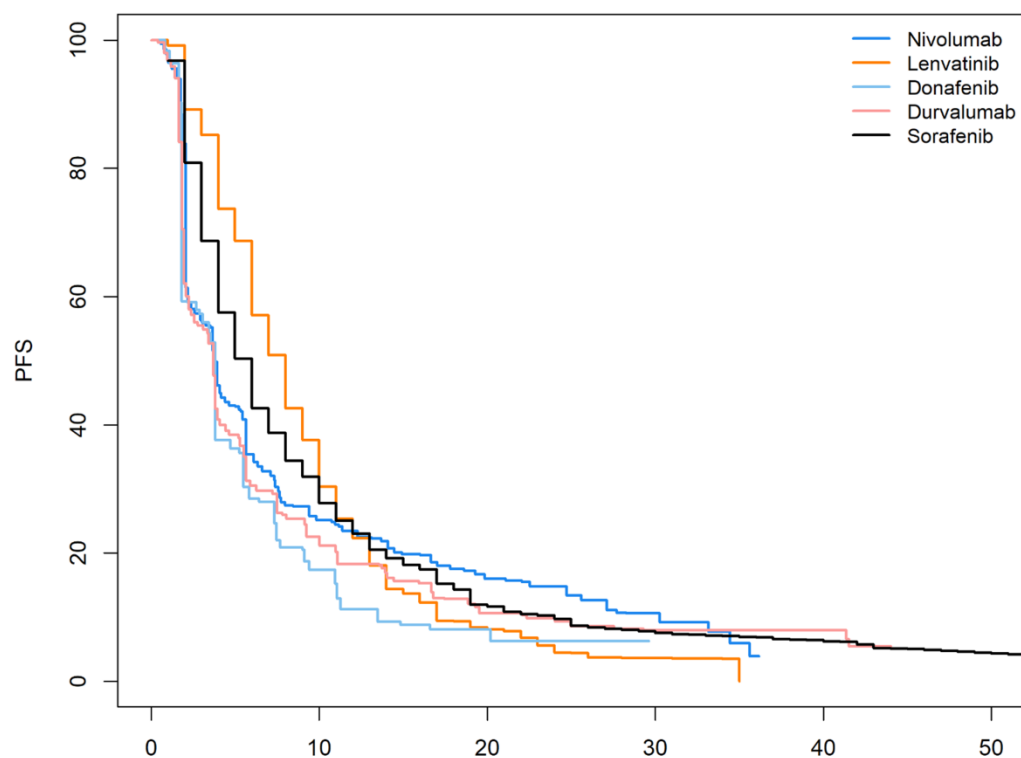
(B)



Supplementary Figure 3. I^2 test for heterogeneity in direct comparison of regimens (A) overall survival (B) progress free survival in this network analysis

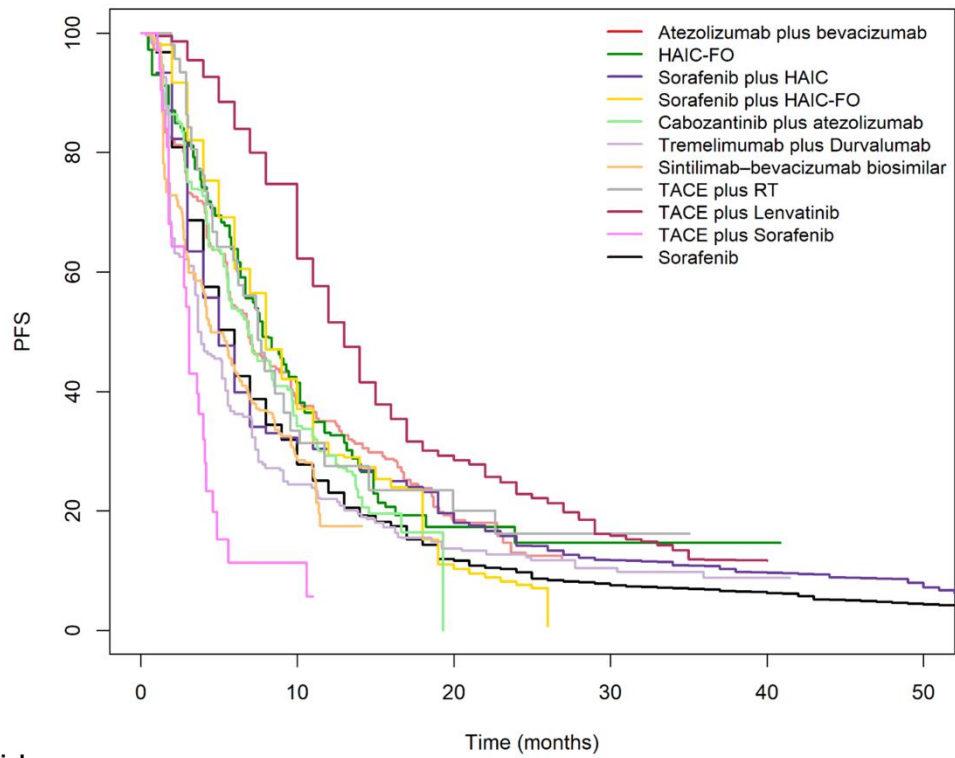


Supplementary Figure 4. Inconsistency vs consistency plot for (A) Overall survival (B) Progression free survival of multimodality treatments. Plot of individual data points for the consistency model (horizontal axis) and the inconsistency model (vertical axis), along with the equality line.



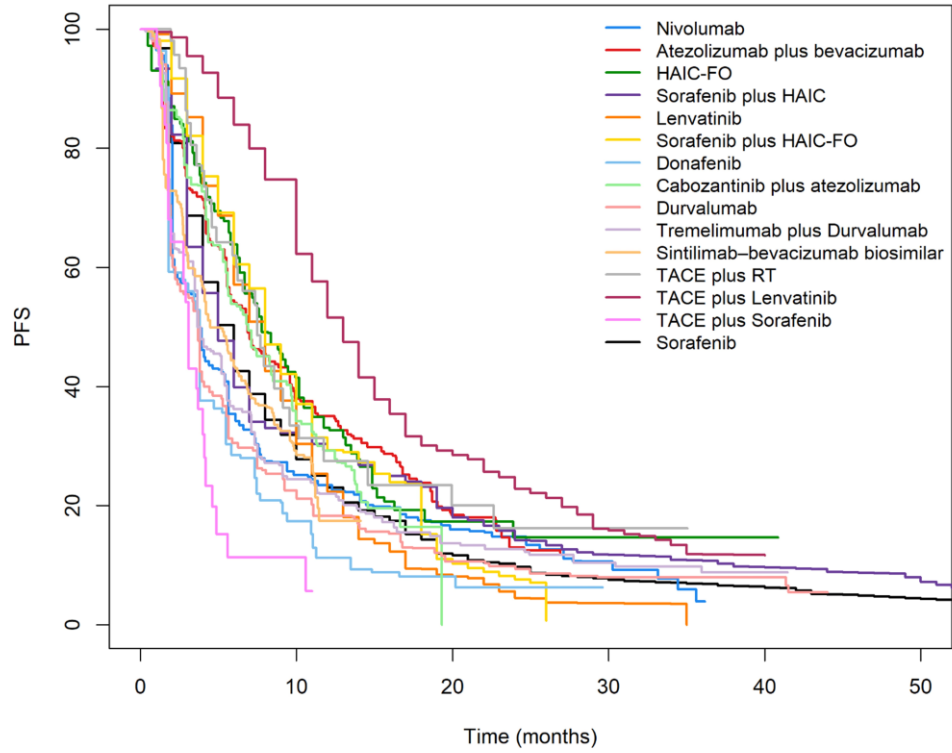
Number at risk	Time (months)					
	0	10	20	30	40	50
Nivolumab	371	84	40	11	0	0
Lenvatinib	478	158	29	4	0	0
Donafenib	328	29	7	0	0	0
Durvalumab	393	91	46	26	1	0
Sorafenib	2699	946	409	201	122	47

Supplementary Figure 5. Kaplan-Meier curves for PFS for monotherapy regimens



	Time (months)					
Number at risk	0	10	20	30	40	50
Atezolizumab plus bevacizumab	165	113	41	0	0	0
HAIC-FO	130	49	17	6	1	0
Sorafenib plus HAIC	150	81	44	22	10	2
Sorafenib plus HAIC-FO	157	49	22	0	0	0
Cabozantinib plus atezolizumab	250	66	0	0	0	0
Tremelimumab plus Durvalumab	389	88	38	20	5	0
Sintilimab-bevacizumab biosimilar	380	37	0	0	0	0
TACE plus RT	45	27	5	1	0	0
TACE plus Lenvatinib	202	137	42	11	0	0
TACE plus Sorafenib	32	2	0	0	0	0
Sorafenib	2699	946	409	201	122	47

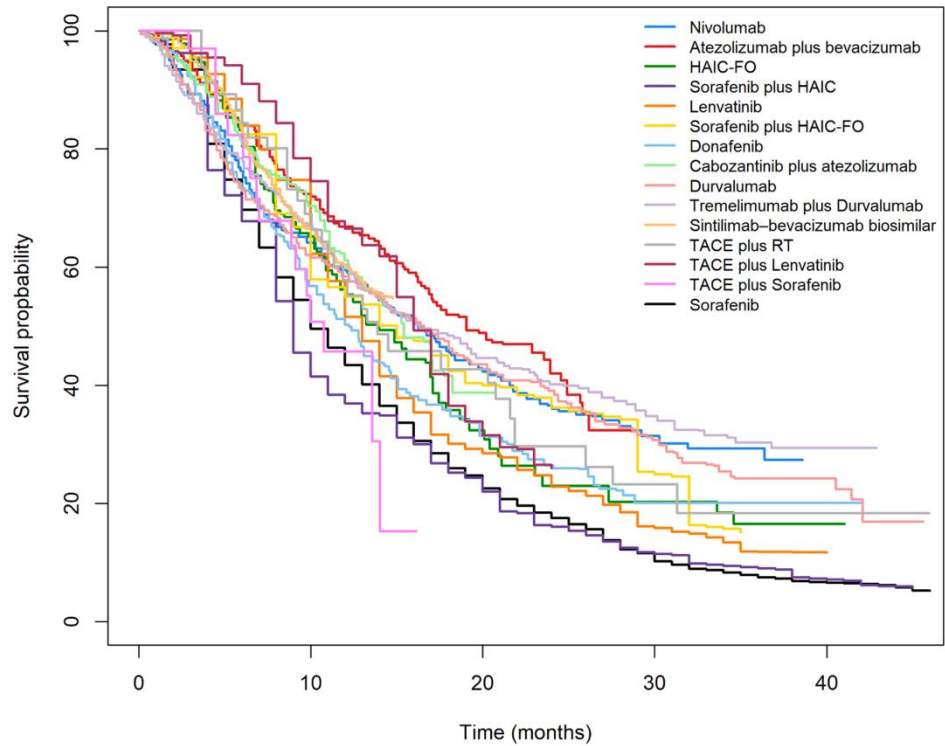
Supplementary Figure 6. Kaplan-Meier curves for PFS for combination regimens



Number at risk

Nivolumab	371	84	40	11	0	0
Atezolizumab plus bevacizumab	165	113	41	0	0	0
HAIC-FO	130	49	17	6	1	0
Sorafenib plus HAIC	150	81	44	22	10	2
Lenvatinib	478	158	29	4	0	0
Sorafenib plus HAIC-FO	157	49	22	0	0	0
Donafenib	328	29	7	0	0	0
Cabozantinib plus atezolizumab	250	66	0	0	0	0
Durvalumab	393	91	46	26	1	0
Tremelimumab plus Durvalumab	389	88	38	20	5	0
Sintilimab-bevacizumab biosimilar	380	37	0	0	0	0
TACE plus RT	45	27	5	1	0	0
TACE plus Lenvatinib	202	137	42	11	0	0
TACE plus Sorafenib	32	2	0	0	0	0
Sorafenib	2699	946	409	201	122	47

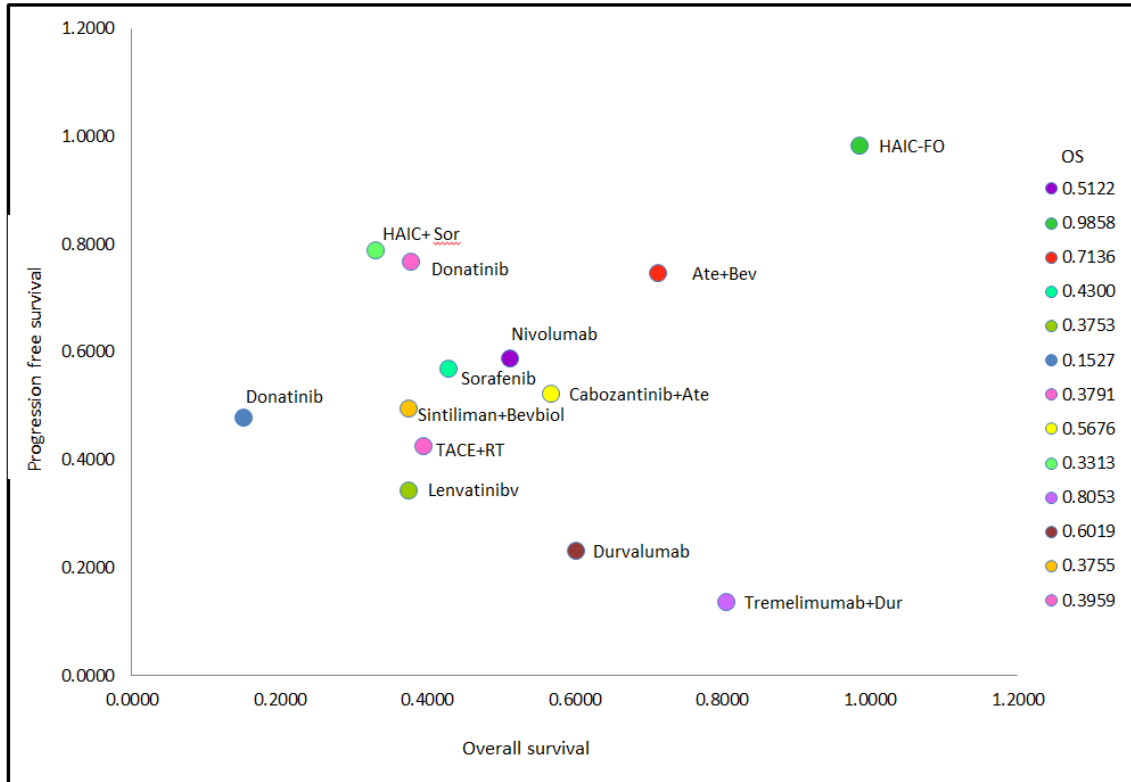
Supplementary Figure 7. Kaplan-Meier curves for progression-free survival for all multimodality regimens



Number at risk

Nivolumab	371	216	147	63	0
Atezolizumab plus bevacizumab	336	233	134	0	0
HAIC-FO	130	76	31	10	0
Sorafenib plus HAIC	166	87	48	22	3
Lenvatinib	646	443	138	41	0
Sorafenib plus HAIC-FO	157	77	28	3	0
Donafenib	328	188	95	25	2
Cabozantinib plus atezolizumab	432	208	0	0	0
Durvalumab	389	256	161	87	8
Tremelimumab plus Durvalumab	389	71	35	20	1
Sintilimab-bevacizumab biosimilar	380	126	0	0	0
TACE plus RT	45	30	18	6	2
TACE plus Lenvatinib	202	121	23	0	0
TACE plus Sorafenib	32	12	0	0	0
Sorafenib	2637	1339	446	66	0

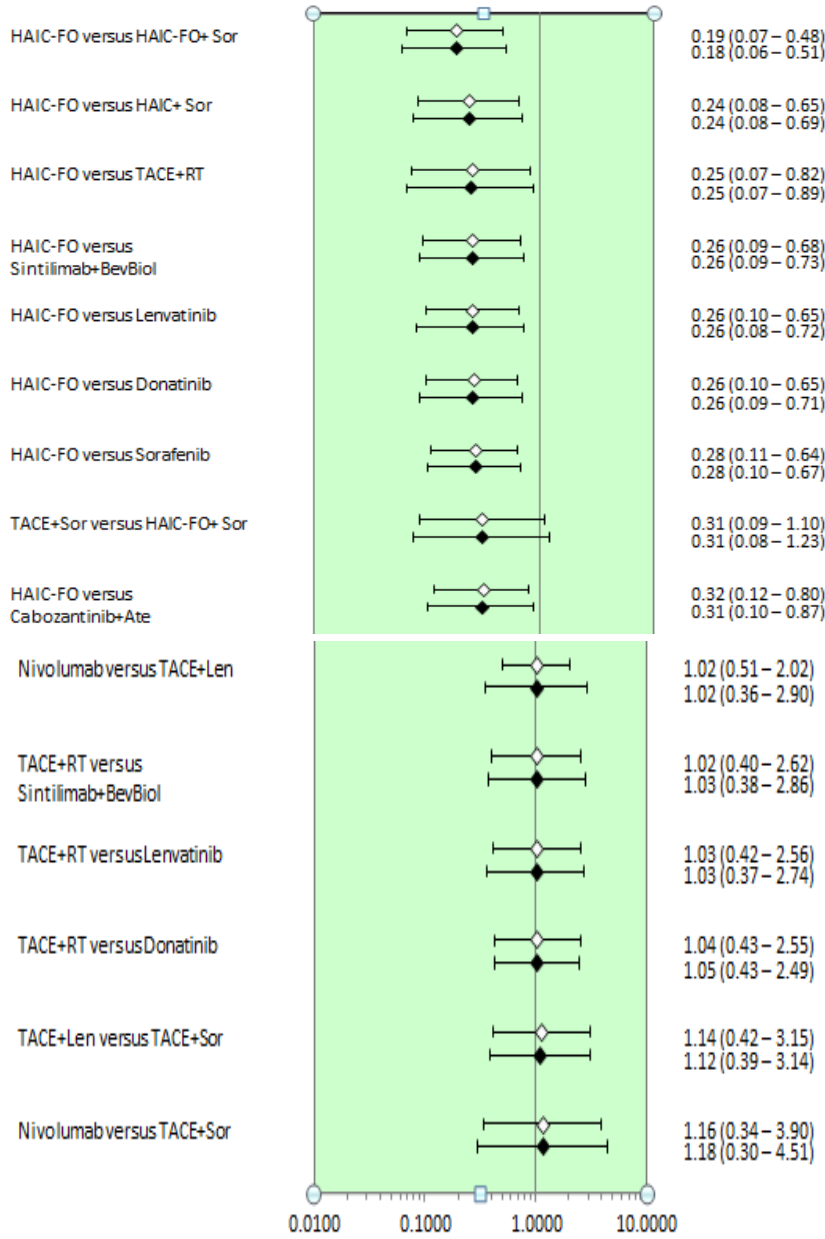
Supplementary Figure 8. Kaplan-Meier curves for overall survival for all multimodality regimens



Supplementary Figure 9. SUCRA ranking probabilities of regimens for PFS and OS. Abbreviations: HAIC (hepatic arterial infusion chemotherapy)

Treatment 1 vs. Treatment 2

O.R. (95% Cr.I.)

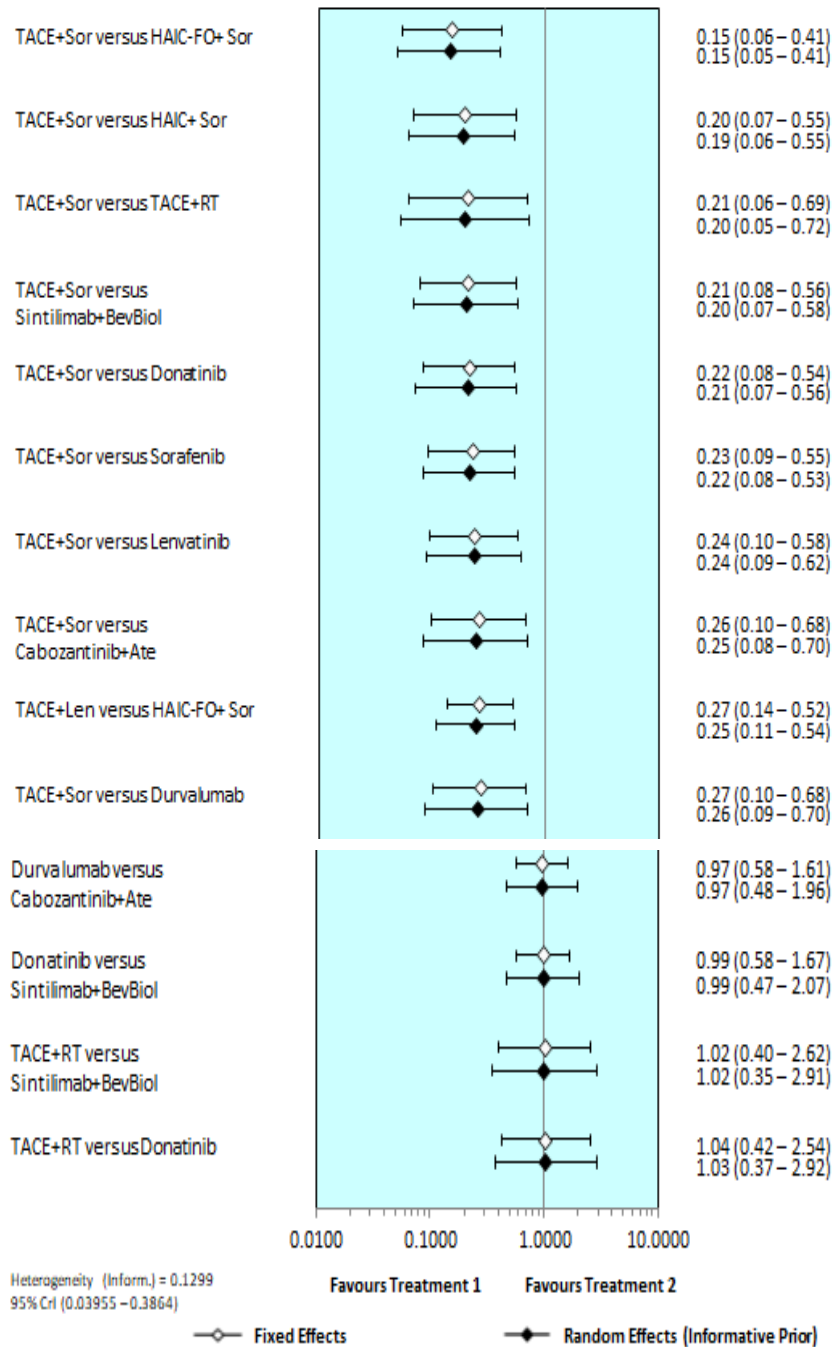


Heterogeneity (Inform.) = 0.1215
95% CrI (0.04039 – 0.3397)

◊ Fixed Effects ◆ Random Effects (Informative Prior)

Treatment 1 vs. Treatment 2

O.R. (95% Cr.I.)



Supplementary Figure 10. Sensitivity analysis results in terms of forest plot including a study (A) without high risk bias, (B) with high risk bias. Both forest plot exhibited similar OR value and heterogeneity.