

((("Carcinoma, Hepatocellular"[Mesh]) AND "Carcinoma, Hepatocellular/therapy"[Mesh] OR Carcinomas, Hepatocellular OR Hepatocellular Carcinomas OR Liver Cell Carcinoma, Adult OR Liver Cancer, Adult OR Adult Liver Cancer OR Adult Liver Cancers OR Cancer, Adult Liver OR Cancers, Adult Liver OR Liver Cancers, Adult OR Liver Cell Carcinoma OR Carcinoma, Liver Cell OR Carcinomas, Liver Cell OR Cell Carcinoma, Liver OR Cell Carcinomas, Liver OR Liver Cell Carcinomas OR Hepatocellular Carcinoma OR Hepatoma OR Hepatomas) AND ("Cohort Studies"[Mesh] OR Cohort Study OR Studies, Cohort OR Study, Cohort OR Concurrent Studies OR Studies, Concurrent OR Concurrent Study OR Study, Concurrent OR Closed Cohort Studies OR Cohort Studies, Closed OR Closed Cohort Study OR Cohort Study, Closed OR Study, Closed Cohort OR Studies, Closed Cohort OR Birth Cohort Studies OR Birth Cohort Study OR Cohort Studies, Birth OR Cohort Study, Birth OR Studies, Birth Cohort OR Study, Birth Cohort OR Analysis, Cohort OR Analyses, Cohort OR Cohort Analyses OR Cohort Analysis OR Historical Cohort Studies OR Cohort Studies, Historical OR Cohort Study, Historical OR Historical Cohort Study OR Study, Historical Cohort OR Studies, Historical Cohort OR Incidence Studies OR Incidence Study OR Studies, Incidence OR Study, Incidence)) AND (HAIC)

Supplementary Material Search strategy in PubMed

Supplementary Table 1 Characteristics of included studies in this analysis

Ref.	Year	t1	Regimen-1	t2	Regimen-2	Sample size		A/B CLC (%)		B/BC LC (%)		C/BC LC (%)		D/B CLC (%)		MVI (%)		EHS (%)		Etiology (HBV/HCV/others)	
						t1	t2	t1	t2	t1	t2	t1	t2	t1	t2	t1	t2	t1	t2	t1	t2
Ly u Ni ng	20 21	HAI C	oxaliplatin(130 mg/m2), leucovorin(400 mg/m2), fluorouracil(400 mg/m2) on day 1, and fluorouracil(2400 mg/m2) for 24 hours	Sorafenib	400 mg twice daily.	130	130	0	0	53.8	96.8	12.2	12.2	0	0	94.3	91.6	44.3	46.3	12.0	11.4

Li Qi - Jiong	20	HAI	oxaliplatin(130 mg/m2), , leucovorin(400 mg/m2), , fluorouracil(400 mg/m2) on day1, and fluorouracil(2400 mg/m2) for 24 hours	TA CE	epirubicin (50 mg), lobaplatin (50 mg), and lipiodol and polyvinyl alcohol particles	1	1														14	14	
	21	C				5	5	9	6	N	N	N	N	N	N	N	N	N	N	N	N	\	\
Kondo Masaki	2019	HAI C+s oraf enib	cisplatin powder(65 mg/m2)	Sorafeni b	400 mg twice daily.	2	3	2	2	1	1	1	1	0	0	21	22	10	8			3	4
						3	3			4	3	9	8									\	\
																						21	18
Choi Jong Hwan	2018	HAI C	cisplatin (60 mg/m2) and 5- fluorouracil (500 mg/m2)	Sorafeni b	400 mg twice daily.	2	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	\	\
						9	9	A	A	A	A	A	A	A	A	A	A	A	A	A	A	29	29
																						(1	(1
))
																						0	5
																						\	\
																						8	6

Zheng Kanglian	2022	HAI C+s orafenib	sorafenib (400 mg twice daily); HAIC:oxaliplatin(35 mg/m2), 5-fluorouracil(600 mg/m2)	Sorafenib	400 mg twice daily	32	32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3200	3200	4(12)	5(16)	28	29
Ikedam	2016	HAI C+s orafenib	sorafenib: 400 mg twice daily; HAIC:cisplatin(65 mg/m2)	Sorafenib	400 mg twice daily.	65	41	0	0	19	16	46	25	0	0	40	17	19	13			22	9

H e M in Ke	20 19	HAI C+s oraf enib	sorafenib: 400 mg twice daily ; HAIC: oxaliplati n(85 mg/m2) , leucovori n (400 mg/m2) , fluoroura cil (400 mg/m2) on day 1, and fluoroura cil (2400 mg/m2) for 46 hours)	Sora feni b	400 mg twice daily.	1 2 5	1 2 2	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	38 (3 0. 4)	4 2(3 4.)	10 0 6 19	99 \ 7 \ 16
K ud o M as at os hi	20 18	HAI C+s oraf enib	sorafenib: 400 mg twice daily ; HAIC: cisplatin(20 mg/m ²), fluoroura cil(330 mg/m ²)	Sora feni b	400 mg twice daily.	1 0 2	1 0 3	0 0	0 0	3 2 1)	2 7 6)	7 0 6)	7 6 7)	0 0	0 0	58 (5 7)	64 (62)	27 (27)	2 6 2 5)	26 \ 47 \ 30	22 \ 46 \ 35

Guojian-Huai	20 20	HAI C+T AC E+S -1	TACE: iodized oil mixed with 20- 40 mg epirubici n hydrochl oride ; HAIC:ox aliplatin(85 mg/m2); S-1: 60 mg,orally twice daily	HAI C+T AC E	TACE: iodize d oil mixed with 20-40 mg epirubi cin hydroc hloride ; HAIC: oxalipl atin (85 mg/m 2)	5	6	N	N	N	N	N	N	N	N	N	34 (6 1. 8)	42 (7 0)	41 (7 4. 5)	3 8(6 3. 3)	47 \ 5 \ 3	45 \ 6 \ 9
			HAIC: cisplatin (60 mg/m2) and 5- fluoroura cil (500 mg/m2) with or without epirubici n (35 mg/m2).		sora feni b	400 mg twice daily.	5 0	6 0	N A	N A	N A	N A	N A	N A	N A	N A	50	60	12	2 1		

Kim Heeyeon	2010	HAI C	5-fluorouracil (500 mg/m ²) and cisplatin (60 mg/m ²)	TACE	doxorubicin(10-60 mg),lipiodol(5-10 mL),	36	31	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	30	26
Hyun Yangu	2016	HAI C	cisplatin(15 mg/m ²) and 5-fluorouracil (50 mg/m ²)	sorafenib	400 mg twice daily.	54	53	N A	N A	N A	N A	N A	N A	N A	N A	54 (100)	53 (100)	28 (59)	3 (56)	44	43

Wei Yu an	20	HAI C	5- fluorouracil(400 mg/m ²), leucovorin(400 mg/m ²), and oxaliplatin(85 mg/m ²)	HAI C+1 env atini b	HAIC: 5- fluoro uracil(400 mg/m ²), leucov orin(40 0 mg/m ²), and oxalipl atin(85 mg/m ²) ; Lenvat inib:(1 2mg for patient s weighi ng >60 kg and 8 mg for patient s weighi ng <60kg)	4	9	0	0	1(5(3(4(0	0	N	N	0	3(2	8
	22				0	5.	5.	5.	4.	0	0	A	A	0	3.	3)	\	\	0	1	0

M ei Jie	20 21	HAI C	oxaliplatin(85 or 135 mg/m2), leucovorin(400 mg/m2), and 400 mg/m2 fluorouracil on the first day; and 2400 mg/m2 fluorouracil over 46 hours	HAI C+P D-1	standa rd dose	1	8	0	0	5	2	9	5	0	0	N	N	11	6	13	72
						4	1			((((A	A	0	((0
						8				3	3	6	6					74	8	\	\
										8	2	2	8)	3	\	9
))))))	14	

So ng G ao	20 15	HAI C+T AC E HAIC: oxaliplatin [60-75 mg/m2 (Child-Pugh A, 75 mg/m2 and Child-Pugh B, 60 mg/m2)] ;folinic acid (200 mg/m2); and 5- fluorouracil [1-1.5 g/m2 (ChildPugh A, 1.5 g/m2 and Child-Pugh B, 1 g/m2)]; TACE: 40 mg of emulsified epirubicin (EPI) and lipiodol (total	TA CE	40 mg of emulsified epirubicin (EPI) and lipiodol (total volume < 20 mL)	4 5	3 9	6 7	3 (1 0 3 3)	4 (5 3 3)	9 (2 3 1)	2 (4 4 1)	2 (5 6 4)	0 0	N A	N A	N A	N A	N A	N A
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N a k a n o M a s a h i t o	20 17	HAI C	HAIC: cisplatin (50 mg fine powder) and 5-fluorou racil (1500 mg/5 days)	sora feni b	400 mg twice daily.	4 4	2 0	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	6 29 9	5 8 7
L i u B a o- J i a n g	20 21	HAI C+T AC E	TACE: lipiodol (5-15 mL) and epirubici n(40-60 mg); HAIC: oxaliplati n (85 mg/m2), leucovori n (200 mg/m2), and 5- fluoroura cil (1.5 g/m2).	TA CE	TACE: lipiodo l (5-15 mL) and epirubi cin (40-60 mg)	6 0	6 0	N A	N A	N A	N A	N A	N A	N A	N A	N A	37 (6 1. 7)	3 5 8. 3)	53 3 4	54 3 3	

C he n Sh ig ua ng	20	HAI C	HAIC: oxaliplati n(100 mg /m2); raltitrex e(3 mg/ m2);	TA CE	TACE: an emulsi on of 5- 20 mL of lipiodo l and epirubi cin(50 mg)	6	6	N	N	N	N	N	N	N	N	N	N	N	59	59	
	22					2	2	A	A	A	A	A	A	A	A	A	A	A	A	A	\
K od a m a Ke ni ch iro	20	HAI C	HAIC: low-dose cisplatin(6 mg/kg bodywei ght/day) combined with 5- fluoroura cil(300 mg/kg bodywei ght/day) and 5- FU(300 mg/kg bodywei ght/day) with interferon (IFN).	sora feni b	400 mg twice daily	1	1	N	N	N	N	N	N	N	N	N	N	40	95	39	22
	18					5	3	A	A	A	A	A	A	A	A	A	A	A	A	A	(3
						0	4											6.	0.	\	\
																		4)	9)	20	23

Ka ng M in K yu	20 18	HAI C	HAIC: cisplatin (25mg/m 2) and 5- fluoroura cil (750mg/ m2)	sora feni b	400 mg twice daily.	9 5	4 4	0	0	1 9(2 0)	1 7(3 8. 6)	7 2(7 5. 8)	2 5(6. 8)	4 (4 . 2)	2 (4 . 5)	N A	N A	N A	N A	67 \ 2 \ 26	34 \ 2 \ 8
N e m ot o To m oy uk i	20 14	HAI C	HAIC: 5-fluorou racil (300 mg/m2) with or without cisplatin (20mg/m 2), with interferon -α).	sora feni b	400 mg twice daily.	8	1 2	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A

Kawao ka To mokazu	2015	HAIC	HAIC: lowdose cisplatin (6 mg/kg per day) plus 5-fluorouracil (300 mg/kg per day), or 5-FU in combination with interferon	sorafeni b	400 mg twice daily.	136	41	00	00	13	33	38	00	00	100(73.5)	16(39)	NA	NA	\75	\24	3315
Kodama Kenichiro	2017	HAIC+RT	HAIC: CDDP(6 mg/kg body weight/day) plus 5-FU(300 mg/kg body weight/day)(FP,) and 5-FU with IFN. RT:30, 39, or 45 Gy	sorafeni b	400 mg twice daily.	36	36	NA	NA	NA	NA	NA	NA	NA	36(100)	36(100)	12(33)	17(47.2)	\17	\11	715

Shiozawa Kazue	2014	HAI C	cisplatin (10 mg/body) and 5-fluorouracil (250 mg/body)	sorafeni b	400 mg twice daily.	40	40	0	0	9(4.7.5)	1(1.2.5)	1(1.2.5)	9(4.7.5)	0	0	16(2.1)	6(1.5)	2(5)	7(1.7.5)	7(1.7.5)	8(1.7.5)	
Ahn Yung Eun	2020	HAI C	cisplatin (60 mg/m2) and 5-fluorouracil (500 mg/m2)	sorafeni b	400 mg twice daily.	38	35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	33	23

Fa ng Lo ng	20 23	HAI C	leucovorin (200 mg/m ²), oxaliplatin (85 mg/m ²), and 5-fluorouracil (400 mg/m ² in bolus, and then 2,400 mg/m ² within 46 h)	HAIC:1 leucovorin (200 mg/m ²), oxaliplatin (85 mg/m ²), and fluorouracil (400 mg/m ² in bolus, and then 2,400 mg/m ² within 46 h) ; Lenvatinib: 12mg(Child-Pugh A,>60kg) ; and 8 mg(Child-Pugh A,<60kg)	1 1 0	1 3 2	N A	N A	N A	N A	N A	N A	N A	N A	46 (4 1. 8)	57 (4 3. 2)	N A	N A	3 \	3 \	10 \	12 \

Li u Yu lo ng	20 22	HAI C+1 env atini b	n (200mg/ m2), and oxaliplati n (85mg/m 2); Lenvatini b: 12mg(Chi ld-Pugh A,>60kg); and 8 mg(Chi ld-Pugh A,<60kg)	HAI C+1 env atini b+a blati on	HAIC: fluoro uracil (400m g/m2 in bolus, and then 2400m g/m2 for 46 hours), leucov orin (200m g/m2), and oxalipl atin (85mg /m2); Lenvat inib: 12mg(Child- Pugh A,>60k g), and 8 mg(C hild- Pugh A,<60k g); Ablati on:60 W. for	9	5	N	N	N	N	N	N	N	N	79	39	72	3	4(92	48
						7	3	A	A	A	A	A	A	A	A	1.	3.	4.	4.	4)	6	6

G uo W en bo	20 20	HAI C+T AC E	HAIC:	TA CE	oxalip atin (100 mg/m 2), leucov orin, (200 mg/m 2), and fluoro uracil (400 mg/m 2)	3 5	3 5	1	1	1 0	1 0	2 4	2 4	0 0	N A	N A	N A	N A	\	33	\	31
			D1: oxaliplati n(100 mg/m2); leucovori n(200 mg/m2); fluoroura cil(400 mg/m2, 15 min); fluoroura cil,(600 mg/m2,2 2 h). D2: leucovori n(200 mg/m2,2 h); fluoroura cil(400 mg/m2,1 5 min); fluoroura cil(600 mg/m2,2 2 h).																			

W u Zh iqi an g	20 22	HAI C+T AC E	TACE: epirubici n(10-50 mg) gelatin sponge or polyvinyl alcohol particles HAIC: (D1: oxaliplati n, 100 mg/m2 , 2 h; leucovori n, 200 mg/m2 , 2 h; fluoroura cil, 400 mg/m2 , 15 min; fluoroura cil, 600 mg/m2 , 22 h. D2: leucovori n, 200 mg/m2 , 2 h; fluoroura cil, 400 mg/m2	TA CE	epirubi cin(10- 50 mg) gelatin sponge or polyvi nyl alcohol particl es	1	1	N	N	N	N	N	N	N	N	N	N	6(6(14	16
			6			7	A	A	A	A	A	A	A	A	A	A	A	A	A	A	37
																		.5	5.	\	\
)	3)	2	1

Y o u H u i m i n	20 22	HAI C	oxaliplatin (130 mg/m ²), leucovorin (200 mg/m ²) and Fluorouracil (400 mg/m ² in bolus, and then 2,400 mg/m ² continuous infusion 46 h)	HAI C+a blati on	oxaliplatin (130 mg/m ²), leucovorin (200 mg/m ²) 2) and Fluorouracil (400 mg/m ² in bolus, and then 2,400 mg/m ² continuous infusion 46 h)	1	9	3	5	1	2	3	1	9	4	0	0	66	35	54	3	2	12	89
						3	3	5	6	0	0	8	7	9	6	0	0	4	3	4	2	4	7	0

Tsai Wei-Lun	2014	HAI C	Cisplatin (10 mg/m ²) , mitomycin-C (2 mg/m ²), 5-fluorouracil (100 mg/m ²), dissolved in 250 ml, Leucovorin (15 mg/m ²)	BSC	symptomatic treatment	58	44	0	0	16	13	42	31	0	0	325	286	N	N	\	\	35	20
Huang Jung	2020	HAI C	oxaliplatin (35-40 mg/m ²) and 5-fluorouracil (600-800 mg/m ²)	TA CE	epirubicin (40-60 mg) and lipiodol and particles (cTACE), or particles alone	22	24	N	N	N	N	N	N	N	N	(100)	(100)	N	N	\	\	21	23

Tsai Wei-Lun	20 20	HAI C	Cisplatin (10 mg/m ²) ,mitomycin-C (2 mg/m ²) , 5-fluorouracil (100 mg/m ²), dissolved in 250 ml, Leucovorin (15 mg/m ²)	TA CE	5 to 15ml lipiodol(5 to 15ml) , small gelfoam pellets	2 6	2 5	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	16 \	16 \
Zaizen Yuki	20 21	HAI C	Cisplatin (65 mg/m ²)	sorafenib	400 mg twice daily.	8 3	8 3	0	0	7 1(8 6)	7 4(8 9)	1 2(1 4)	9(1 1)	0	0	12 (14)	9(11)	N A	N A	6 \	7 \
																				67 \	65 \
																				10	11

Ly u Ni ng	20 18	HAI C	oxaliplatin (130 mg/m ² infusion for 3 hours on day 1), leucovorin (200 mg/m ² from hour 3 to 5 on day 1) and Fluorouracil (400 mg/m ² in bolus, and then 2,400 mg/m ² for 46 hours)	sora feni b	400 mg twice daily.	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
			A			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

C he n Sh ig ua ng	20	HAI	oxaliplatin(100 mg/m ²); raltitrexed(3 mg/m ²)	TA CE	An emulsion of 5-20 ml of lipiodol and epirubicin(50 mg) , gelatin sponge particles (GSPs).	4	4	N	N	N	N	N	N	N	N	N	44	44	N	N	42	41
	22	C																				

Li Qi - Jiong	20 21	HAI C	oxaliplatin (130 mg/m ² infusion for 3 hours on day 1), leucovorin (200 mg/m ² from hour 3 to 5 on day 1) and Fluorouracil (400 mg/m ² in bolus, and then 2,400 mg/m ² for 46 hours)	TA CE	epirubicin(40-60 mg) mixed with 5-20 mL of lipiodol. gelatin sponge particles or 300-500-µm-diameter polyvinyl alcohol particles	6	6	N	N	N	N	N	N	N	N	N	44	45	28	1	61	60
			7		7	A	A	A	A	A	A	A	A	A	(6	(6	(2	6((9	(8	3	1)

H e M in- Ke	20 17	HAI C	oxaliplatin(85 mg/m ² ,day 1); leucovorin, (400 mg/m ² ,day 1); and 5-fluorouracil(400 mg/m ² bolus infusion on day 1 and 2400 mg/m ² continuous infusion over 46h)	TA CE	epirubicin(50 mg),lobaplatin(50 mg), mitomycin(6 mg), and lipiodol and polyvinyl alcohol particles.	3 8	4 1	3 9	2 6	1 5	1 1	2 3	3 0	0 0	0 0	0 0	N A	N A	N A	N A	\ \	\ \	36 2	36 5
Su mi e Sh uji	20 03	HAI C	cisplatin (10 mg/person) and 5-fluorouracil (250 mg/person)	TA CE	epirubicin (20-30 mg/person) and lipiodol	1 6	2 1	N A	N A	N A	N A	N A	N A	N A	N A	N A	16 (100)	21 (100)	N A	N A	\ \	\ \	1 15 0	2 19 0

N a g a i H i d e n a r i	20	HAI	leucovorin (12 mg/h), cisplatin (10 mg/h), 5-FU (250 mg/m ² /22h)	HAI	sorafenib (400 or 800 mg/day)	2	1	N	N	N	N	N	N	N	N	N	N	N	4	5
	15	C		C+S		0	8	A	A	A	A	A	A	A	A	A	A	A	\	\
																			11	8
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HAI
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Regimen
A:
cisplatin
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Regimen
B:
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epirubici
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and daily
cisplatin
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mg/m2)
followed
by 5-FU
(250
mg/body
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M ori gu ch i M ic hi hi sa	20 17	HAI C	cisplatin (10 mg/1 h), 5- fluoroura cil (250 mg/5 h)	sora feni b	400 mg twice daily.	3 2	1 4	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	32 (1 00)	14 (1 00)	7(21 .9)	5(3 5. 7)	12 \ 7 \ 13	4 \ 8 \ 2
Iw a m ot o Hi de ki	20 21	HAI C	fine- powder CDDP(50 mg),5- FU(250 mg),lipio dol(5- 10ml); Then,5- FU(1250 mg) by infusion pump	sora feni b	400 mg twice daily.	3 4 4	3 4 4	0 0	0 0	7 0. 3)	8 2 5. 9)	2 4(7 9. 7)	2 5(7 4. 1)	0 0	0 0	25 .3)	26 .6)	11 4(33 .5)	1 2(3 5. 5)	71 \ 16 8 \ 10 5	76 \ 15 2 \ 11 6			
Je on g So un g W on	20 12	HAI C	cisplatin (7 mg/m2) and 5-FU (170 mg/m2)	sora feni b	400 mg twice daily.	2 1	2 0	N A	N A	N A	N A	N A	N A	N A	N A	N A	N A	14 (6 6. 7)	17 (8 1)	7(33 .3)	1 0(5 0)	N A	N A	

BCLC: Barcelona Clinic Liver Cancer.

Supplementary Table 2 Newcastle-Ottawa Scale for assessing the quality of cohort studies (9-point)

Study	Representativeness of the exposed cohort	Selection of the non-exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis controlled for confounders	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow-up of cohort	Quality score
Young Eun Ahn 2021	1	1	1	1	2	1	1	1	9
Shiguang Chen ¹ 2022	1	1	1	1	2	1	1	1	9
Shiguang Chen ² 2022	1	1	1	1	2	1	1	1	9
Song Gao 2015	1	1	1	1	1	1	1	1	8
Wenbo Guo 2020	1	1	1	1	2	1	1	1	9
MinKe He 2017	1	1	1	1	1	1	1	1	8
Yasunari Hiramine	1	1	1	1	1	1	1	1	8

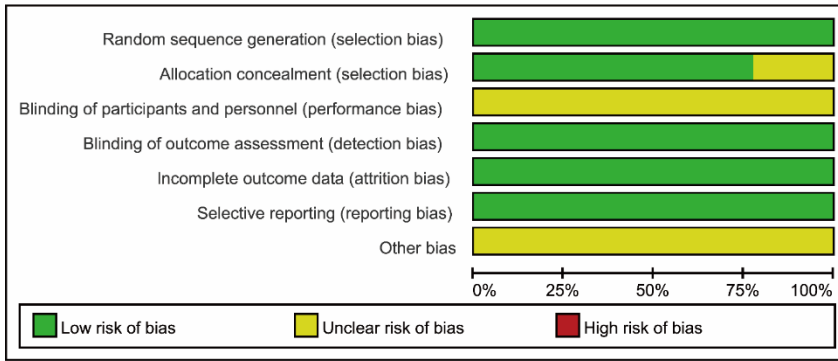
2011									
Jungang	1	1	1	1	1	1	1	1	8
Hu 2020									
Hideki	1	1	1	1	1	1	1	1	8
Iwamoto2									
021									
Soung	1	1	1	1	1	1	1	1	8
Won									
JEONG20									
12									
Min Kyu	1	1	1	1	1	1	1	1	8
Kang2018									
Tomokaz	1	1	1	1	1	1	1	1	8
u									
KAWAO									
KA2015									
Hee Yeon	1	1	1	1	2	1	1	1	9
Kim2010									
Kenichiro	1	1	1	1	2	1	1	1	9
Kodama ¹²									
018									
Kenichiro	1	1	1	1	1	1	1	1	8
Kodama ²²									
018									
Shaolong	1	1	1	1	1	1	1	1	8
Li 2018									
Bao-Jiang	1	1	1	1	1	1	1	1	8
Liu2021									
Yulong Li	1	1	1	1	1	1	1	1	8
u2023									
Fang	1	1	1	1	2	1	1	1	9
Long 202									

3									
Ning	1	1	1	1	1	1	1	1	8
Lyu2018									
Jie	1	1	1	1	1	1	1	1	8
Mei2021									
Michihisa	1	1	1	1	1	1	1	1	8
Moriguchi									
2017									
HIDENA	1	1	1	1	1	1	1	1	8
RI									
NAGAI12									
015									
MASAHI	1	1	1	1	1	1	1	1	8
TO									
NAKANO									
2017									
TOMOYU	1	1	1	1	1	1	1	1	8
KI									
NEMOTO									
2014									
TOMOYU	1	1	1	1	1	1	1	1	8
KI									
NEMOTO									
2014									
Do Seon	1	1	1	1	2	1	1	1	9
Song 2015									
Shuji	1	1	1	1	1	1	1	1	8
Sumie200									
3									
Wei-Lun	1	1	1	1	1	1	1	1	8
Tsai2014									
Wei-Lun	1	1	1	1	1	1	1	1	8
Tsai2020									

Zhiqiang	1	1	1	1	1	1	1	1	8
Wu2022									
Hyun	1	1	1	1	2	1	1	1	9
Yang2017									
Huimin	1	1	1	1	1	1	1	1	8
You2022									
Wei	1	1	1	1	1	1	1	1	8
Yuan2023									
Yuki	1	1	1	1	1	1	1	1	8
Zaizen202									
1									

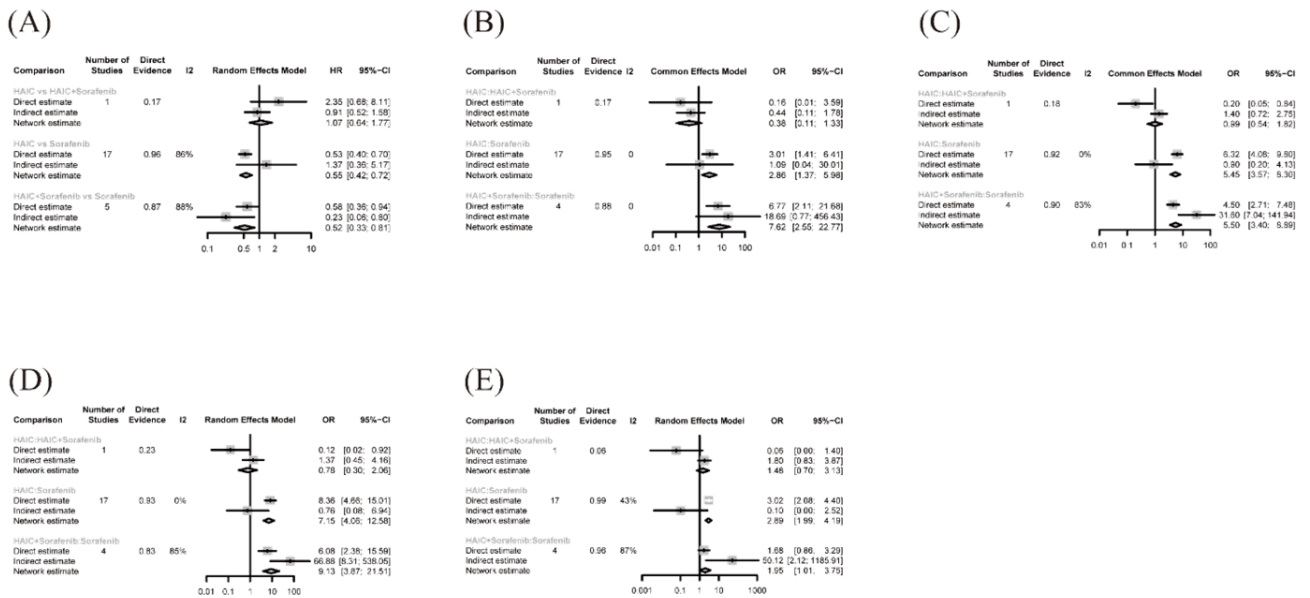
Supplementary Table 3 Results of heterogeneity analysis and the effects model adopted

	I ²	Effects model
OS	82.90%	Random
PFS	81.90%	Random
CR	0	Fixed
PR	49.80%	Fixed
ORR	53%	Random
DCR	53.70%	Random
Any grades AEs	37.40%	Fixed
3-4 grades AEs	68.20%	Random
3-4 grades AEs for thrombocytopenia	0	Fixed
3-4 grades AEs for elevated total bilirubin	0	Fixed

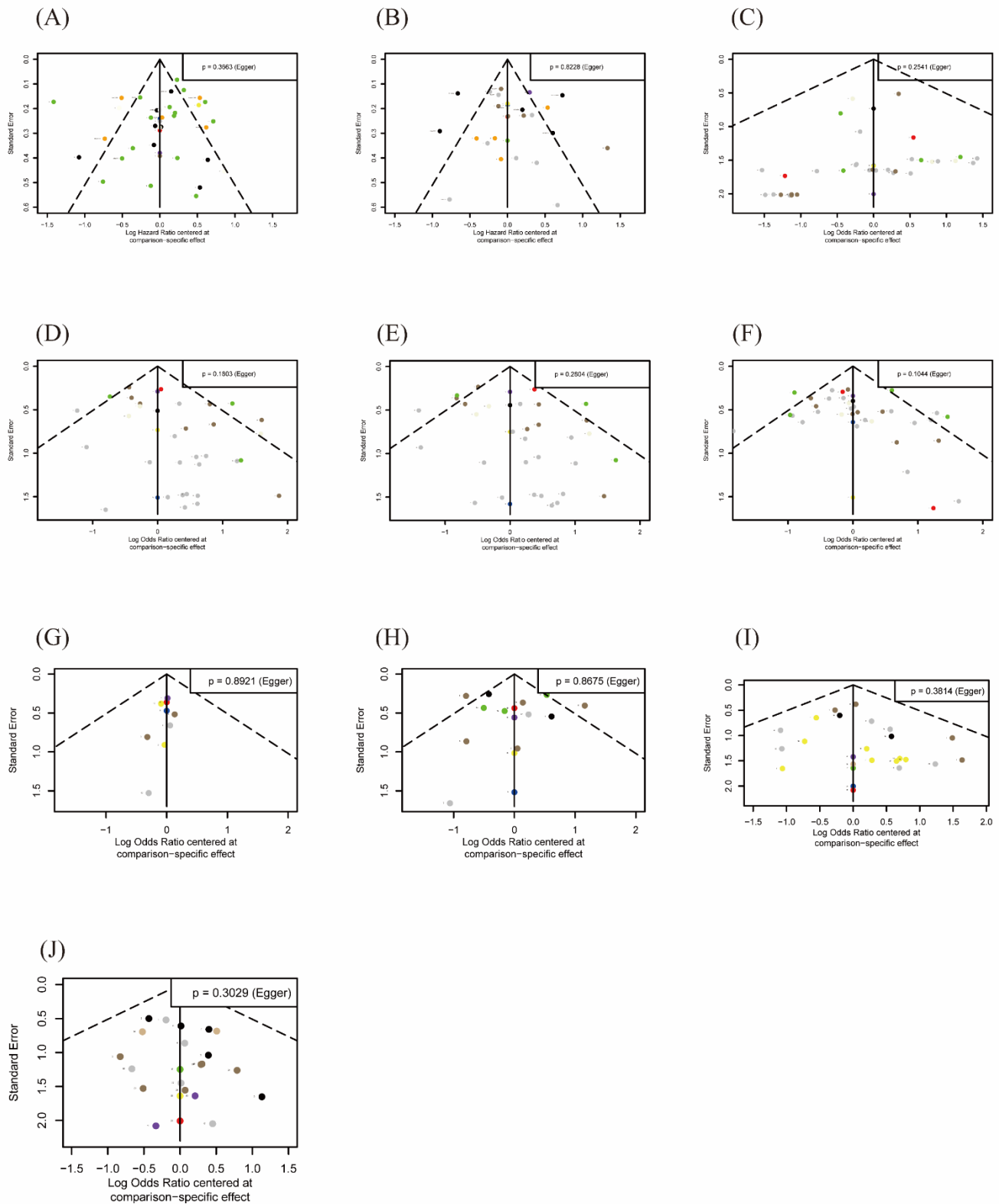


	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Jian-Hai 2022	+	+	?	+	+	+	?
Jong 2018	+	+	?	+	+	+	?
Kanglian 2022	+	+	?	+	+	+	?
M. Ikeda 2016	+	+	?	+	+	+	?
Masaaki 2019	+	+	?	+	+	+	?
Masatoshi 2018	+	+	?	+	+	+	?
MinKe 2019	+	?	?	+	+	+	?
Ning 2022	+	+	?	+	+	+	?
Qijiong 2022	+	?	?	+	+	+	?

Supplementary Figure 1 Quality assessment of RCTs.



Supplementary Figure 2 Node-splitting method for assessing consistency between direct and indirect evidence. (A) Forest plot of node-splitting for OS; (B) Forest plot of node-splitting for CR; (C) Forest plot of node-splitting for PR; (D) Forest plot of node-splitting for ORR; (E) Forest plot of node-splitting for DCR.



Supplementary Figure 3 Results of publication bias (the Funnel Plot of Enrolled Trials). (A) funnel plot of OS; (B) funnel plot of PFS; (C) funnel plot of CR; (D) funnel plot of PR; (E) funnel plot of ORR; (F) funnel plot of DCR; (G) funnel plot of any grades AEs; (H) funnel plot of 3-4 grades AEs; (I) funnel plot of 3-4 grades AEs for thrombocytopenia; (J) funnel plot of 3-4 grades AEs for elevated total bilirubin.