

Table SI. Characteristics of all the studies included in the meta-analysis.

First author/s, year	Mean tumor size, cm		Tumor n \geq 2, %		Mean age, years		Child A, %		Cirrhosis, %		HBsAg, %		(Refs.)
	EG	CG	EG	CG	EG	CG	EG	CG	EG	CG	EG	CG	
Kamiyama <i>et al</i> , 2007	6.5	11.0	40.0	57.1	53.5	56.1	100.0	85.7	60.0	39.3	46.7	57.1	(27)
Li <i>et al</i> , 2016	10.0	9.0	6.7	20.0	50.0	47.0	88.9	84.0	64.4	60.0	NA	NA	(28)
Zhang <i>et al</i> , 2016	9.9	9.1	38.3	41.0	47.9	46.8	NA	NA	NA	NA	91.0	95.0	(29)
Chong <i>et al</i> , 2018	4.4	6.4	NA	NA	50.0	48.7	NA	NA	NA	NA	84.5	83.3	(30)
Wei <i>et al</i> , 2019	NA	NA	11.0	15.9	52.8	50.5	96.3	97.6	15.9	17.1	91.5	92.7	(25)
Hu <i>et al</i> , 2023	9.7	9.6	30.2	34.9	47.4	50.0	NA	NA	58.1	65.1	86.0	95.3	(26)

EG, experimental group; CG, control group; NA, not available; HBsAg, hepatitis B surface antigen.

Table SII. Quality assessment of the RCT.

First author/s, year	Sequence generation	Allocation concealment	Blinding	Incomplete outcome data	Selective outcome reporting	Free of other bias	(Ref.)
Wei <i>et al</i> , 2019	Low risk	Low risk	High risk	Low risk	Low risk	High risk	(25)

The RCT was assessed using the Cochrane Collaboration tool. The risk of bias was assessed as 'low risk', 'high risk' or 'unclear risk'. RCT, randomized control trial.

Table SIII. Quality assessment of observational studies included.

First author/s, year	Selection (out of 4)				Comparability (out of 2)	Outcomes (out of 3)			Total (out of 9)	(Refs.)
	Representative ness of exposed cohort	Selection of non-exposed cohort	Ascertain ment of exposure	Outcome not present at the start of the study		Assessment of outcomes	Length of follow- up	Adequacy of follow- up		
Hu <i>et al</i> , 2023	1	1	1	1	2	1	1	1	9	(26)
Chong <i>et al</i> , 2018	1	1	1	1	1	1	0	0	6	(30)
Zhang <i>et al</i> , 2016	1	1	1	0	2	1	1	1	8	(29)
Li <i>et al</i> , 2016	1	1	1	1	1	1	0	1	7	(28)
Kamiyama <i>et al</i> , 2007	1	1	1	0	1	1	1	1	7	(27)

Observational studies were assessed using the Newcastle-Ottawa Quality Assessment Scale.

Supplementary Search Strategy.

Pubmed

Search number	Query	Search Details	Results
1	neoadjuvant therapies OR neoadjuvant chemotherapy OR neoadjuvant radiation OR neoadjuvant chemoradiotherapy OR interventional therapy OR targeted therapy OR immunotherapy	"neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "therapies"[All Fields]) OR "neoadjuvant therapies"[All Fields] OR ("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "chemotherapy"[All Fields]) OR "neoadjuvant chemotherapy"[All Fields]) OR ("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "radiation"[All Fields]) OR "neoadjuvant radiation"[All Fields]) OR ("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "chemoradiotherapy"[All Fields]) OR "neoadjuvant chemoradiotherapy"[All Fields]) OR (("intervention s"[All Fields] OR "interventions"[All Fields] OR "interventive"[All Fields] OR "methods"[MeSH Terms] OR "methods"[All Fields] OR "intervention"[All Fields] OR "interventional"[All Fields]) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapy s"[All Fields] OR "therapys"[All Fields])) OR (("target"[All Fields] OR "targetability"[All Fields] OR "targetable"[All Fields] OR "targeted"[All Fields] OR "targeting"[All Fields] OR "targetings"[All Fields] OR "targets"[All Fields] OR "targetted"[All Fields] OR "targetting"[All Fields]) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapy s"[All Fields] OR "therapys"[All Fields])) OR ("immunotherapy"[MeSH Terms] OR "immunotherapy"[All Fields] OR "immunotherapies"[All Fields] OR "immunotherapy s"[All Fields])	5,814,584
2	hepatocellular carcinoma OR HCC	"carcinoma, hepatocellular"[MeSH Terms] OR ("carcinoma"[All Fields] AND "hepatocellular"[All Fields]) OR "hepatocellular carcinoma"[All Fields] OR ("hepatocellular"[All Fields] AND "carcinoma"[All Fields]) OR "HCC"[All Fields]	165,518
3	portal vein tumor thrombus OR PVTT	("portal vein"[MeSH Terms] OR ("portal"[All Fields] AND "vein"[All Fields]) OR "portal vein"[All Fields]) AND ("cysts"[MeSH Terms] OR "cysts"[All Fields] OR "cyst"[All Fields] OR "neurofibroma"[MeSH Terms] OR "neurofibroma"[All Fields] OR "neurofibromas"[All Fields] OR "tumor s"[All Fields] OR "tumoral"[All Fields] OR "tumorous"[All Fields] OR "tumour"[All Fields] OR "neoplasms"[MeSH Terms] OR "neoplasms"[All Fields] OR "tumor"[All Fields] OR "tumour s"[All Fields] OR "tumoural"[All Fields] OR "tumourous"[All Fields] OR "tumours"[All Fields] OR "tumors"[All Fields]) AND ("thrombosis"[MeSH Terms] OR "thrombosis"[All Fields] OR "thrombus"[All Fields])) OR "PVTT"[All Fields]	4084
4	((neoadjuvant therapies OR neoadjuvant chemotherapy OR neoadjuvant radiation OR neoadjuvant chemoradiotherapy OR interventional therapy OR targeted therapy OR immunotherapy) AND (hepatocellular carcinoma OR HCC)) AND (portal vein tumor thrombus OR PVTT)	("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "therapies"[All Fields]) OR "neoadjuvant therapies"[All Fields] OR ("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "chemotherapy"[All Fields]) OR "neoadjuvant chemotherapy"[All Fields]) OR ("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "radiation"[All Fields]) OR "neoadjuvant radiation"[All Fields]) OR ("neoadjuvant therapy"[MeSH Terms] OR ("neoadjuvant"[All Fields] AND "therapy"[All Fields]) OR "neoadjuvant therapy"[All Fields] OR ("neoadjuvant"[All Fields] AND "chemoradiotherapy"[All Fields]) OR "neoadjuvant chemoradiotherapy"[All Fields]) OR (("intervention s"[All Fields] OR "interventions"[All Fields] OR "interventive"[All Fields] OR "methods"[MeSH Terms] OR "methods"[All Fields] OR "intervention"[All Fields] OR "interventional"[All Fields]) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapy s"[All Fields] OR "therapys"[All Fields])) OR (("target"[All Fields] OR "targetability"[All Fields] OR "targetable"[All Fields] OR "targeted"[All Fields] OR "targeting"[All Fields] OR "targetings"[All Fields] OR "targets"[All Fields] OR "targetted"[All Fields] OR "targetting"[All Fields]) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "therapies"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "therapy s"[All Fields] OR "therapys"[All Fields])) OR ("immunotherapy"[MeSH Terms] OR "immunotherapy"[All Fields] OR "immunotherapies"[All Fields] OR "immunotherapy s"[All Fields]) AND ("carcinoma, hepatocellular"[MeSH Terms] OR ("carcinoma"[All Fields] AND "hepatocellular"[All Fields]) OR "hepatocellular carcinoma"[All Fields] OR ("hepatocellular"[All Fields] AND "carcinoma"[All Fields]) OR "HCC"[All Fields]) AND (((("portal vein"[MeSH Terms] OR ("portal"[All Fields] AND "vein"[All Fields]) OR "portal vein"[All Fields]) AND ("cysts"[MeSH Terms] OR "cysts"[All Fields] OR "cyst"[All Fields] OR "neurofibroma"[MeSH Terms] OR "neurofibroma"[All Fields] OR "neurofibromas"[All Fields] OR "tumor s"[All Fields] OR "tumoral"[All Fields] OR "tumorous"[All Fields] OR "tumour"[All Fields] OR "neoplasms"[MeSH Terms] OR "neoplasms"[All Fields] OR "tumor"[All Fields] OR "tumour s"[All Fields] OR "tumoural"[All Fields] OR "tumourous"[All Fields] OR "tumours"[All Fields] OR "tumors"[All Fields]) AND ("thrombosis"[MeSH Terms] OR "thrombosis"[All Fields] OR "thrombus"[All Fields])) OR "PVTT"[All Fields])	865

Search number	Search Details	Results
1	<p>TS=(Neoadjuvant Therapies OR Neoadjuvant Chemotherapy OR neoadjuvant radiation OR interventional therapy OR targeted therapy OR immunotherapy)</p> <p>TS=(Neoadjuvant Therapies OR Therapy, Neoadjuvant OR Neoadjuvant Treatment OR Neoadjuvant Treatments OR Treatment, Neoadjuvant OR Neoadjuvant Chemotherapy OR Chemotherapy, Neoadjuvant OR Neoadjuvant Chemotherapies OR Neoadjuvant Chemotherapy Treatment OR Chemotherapy Treatment, Neoadjuvant OR Neoadjuvant Chemotherapy Treatments OR Treatment, Neoadjuvant Chemotherapy OR Neoadjuvant Chemoradiotherapy OR Chemoradiotherapy, Neoadjuvant OR Neoadjuvant Chemoradiotherapies OR Neoadjuvant Chemoradiation OR Chemoradiation, Neoadjuvant OR Neoadjuvant Chemoradiations OR Neoadjuvant Chemoradiation Therapy OR Chemoradiation Therapy, Neoadjuvant OR Neoadjuvant Chemoradiation Therapies OR Therapy, Neoadjuvant Chemoradiation OR Neoadjuvant Chemoradiation Treatment OR Chemoradiation Treatment, Neoadjuvant OR Neoadjuvant Chemoradiation Treatments OR Treatment, Neoadjuvant Chemoradiation OR Neoadjuvant Systemic Therapy OR Neoadjuvant Systemic Therapies OR Systemic Therapy, Neoadjuvant OR Therapy, Neoadjuvant Systemic OR Neoadjuvant Systemic Treatment OR Neoadjuvant Systemic Treatments OR Systemic Treatment, Neoadjuvant OR Treatment, Neoadjuvant Systemic OR Neoadjuvant Radiotherapy OR Neoadjuvant Radiotherapies OR Radiotherapy, Neoadjuvant OR Neoadjuvant Radiation OR Neoadjuvant Radiations OR Radiation, Neoadjuvant OR Neoadjuvant Radiation Treatment OR Neoadjuvant Radiation Treatments OR Radiation Treatment, Neoadjuvant OR Treatment, Neoadjuvant Radiation OR Neoadjuvant Radiation Therapy OR Neoadjuvant Radiation Therapies OR Radiation Therapy, Neoadjuvant OR Therapy, Neoadjuvant Radiation OR interventional therapy OR targeted therapy OR immunotherapy)</p>	1,525,717
2	<p>TS=(hepatocellular carcinoma OR HCC)</p> <p>TS=(Carcinomas, Hepatocellular OR Hepatocellular Carcinomas OR Hepatocellular Carcinoma OR Hepatoma OR Hepatomas 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 Liver Cell Carcinoma, Adult OR HCC)</p>	384,696
3	<p>TS=(portal vein tumor thrombus OR PVTT)</p> <p>TS=(portal vein tumor thrombus OR PVTT)</p>	2390
4	<p>((TS=(Neoadjuvant Therapies OR Neoadjuvant Chemotherapy OR neoadjuvant radiation OR interventional therapy OR targeted therapy OR immunotherapy)) AND TS=(hepatocellular carcinoma OR HCC)) AND TS=(portal vein tumor thrombus OR PVTT)</p> <p>((TS=(Neoadjuvant Therapies OR Therapy, Neoadjuvant OR Neoadjuvant Treatment OR Neoadjuvant Treatments OR Treatment, Neoadjuvant OR Neoadjuvant Chemotherapy OR Chemotherapy, Neoadjuvant OR Neoadjuvant Chemotherapies OR Neoadjuvant Chemotherapy Treatment OR Chemotherapy Treatment, Neoadjuvant OR Neoadjuvant Chemotherapy Treatments OR Treatment, Neoadjuvant Chemotherapy OR Neoadjuvant Chemoradiotherapy OR Chemoradiotherapy, Neoadjuvant OR Neoadjuvant Chemoradiotherapies OR Neoadjuvant Chemoradiation OR Chemoradiation, Neoadjuvant OR Neoadjuvant Chemoradiations OR Neoadjuvant Chemoradiation Therapy OR Chemoradiation Therapy, Neoadjuvant OR Neoadjuvant Chemoradiation Therapies OR Therapy, Neoadjuvant Chemoradiation OR Neoadjuvant Chemoradiation Treatment OR Chemoradiation Treatment, Neoadjuvant OR Neoadjuvant Chemoradiation Treatments OR Treatment, Neoadjuvant Chemoradiation OR Neoadjuvant Systemic Therapy OR Neoadjuvant Systemic Therapies OR Systemic Therapy, Neoadjuvant OR Therapy, Neoadjuvant Systemic OR Neoadjuvant Systemic Treatment OR Neoadjuvant Systemic Treatments OR Systemic Treatment, Neoadjuvant OR Treatment, Neoadjuvant Systemic OR Neoadjuvant Radiotherapy OR Neoadjuvant Radiotherapies OR Radiotherapy, Neoadjuvant OR Neoadjuvant Radiation OR Neoadjuvant Radiations OR Radiation, Neoadjuvant OR Neoadjuvant Radiation Treatment OR Neoadjuvant Radiation Treatments OR Radiation Treatment, Neoadjuvant OR Treatment, Neoadjuvant Radiation OR Neoadjuvant Radiation Therapy OR Neoadjuvant Radiation Therapies OR Radiation Therapy, Neoadjuvant OR Therapy, Neoadjuvant Radiation OR interventional therapy OR targeted therapy OR immunotherapy)) AND TS=(Carcinomas, Hepatocellular OR Hepatocellular Carcinomas OR Hepatocellular Carcinoma OR Hepatoma OR Hepatomas 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 Liver Cell Carcinoma, Adult OR HCC)) AND TS=(portal vein tumor thrombus OR PVTT)</p>	112

Embase

Search number	Query	Search Details	Results
1	'neoadjuvant therapy'/exp OR 'neoadjuvant therapy'	'neoadjuvant therapy'/exp OR 'neoadjuvant therapy' OR 'neoadjuvant therapies':ab,kw,ti OR 'therapy, neoadjuvant':ab,kw,ti OR 'neoadjuvant treatment':ab,kw,ti OR 'neoadjuvant treatments':ab,kw,ti OR 'treatment, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemotherapy':ab,kw,ti OR 'chemotherapy, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemotherapies':ab,kw,ti OR 'neoadjuvant chemotherapy treatment':ab,kw,ti OR 'chemotherapy treatment, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemotherapy treatments':ab,kw,ti OR 'treatment, neoadjuvant chemotherapy':ab,kw,ti OR 'neoadjuvant chemoradiotherapy':ab,kw,ti OR 'chemoradiotherapy, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemoradiotherapies':ab,kw,ti OR 'neoadjuvant chemoradiation':ab,kw,ti OR 'chemoradiation, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemoradiations':ab,kw,ti OR 'neoadjuvant chemoradiation therapy':ab,kw,ti OR 'chemoradiation therapy, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemoradiation therapies':ab,kw,ti OR 'therapy, neoadjuvant chemoradiation':ab,kw,ti OR 'neoadjuvant chemoradiation treatment':ab,kw,ti OR 'chemoradiation treatment, neoadjuvant':ab,kw,ti OR 'neoadjuvant chemoradiation treatments':ab,kw,ti OR 'treatment, neoadjuvant chemoradiation':ab,kw,ti OR 'neoadjuvant systemic therapy':ab,kw,ti OR 'neoadjuvant systemic therapies':ab,kw,ti OR 'systemic therapy, neoadjuvant':ab,kw,ti OR 'therapy, neoadjuvant systemic':ab,kw,ti OR 'neoadjuvant systemic treatment':ab,kw,ti OR 'neoadjuvant systemic treatments':ab,kw,ti OR 'systemic treatment, neoadjuvant':ab,kw,ti OR 'treatment, neoadjuvant systemic':ab,kw,ti OR 'neoadjuvant radiotherapy':ab,kw,ti OR 'neoadjuvant radiotherapies':ab,kw,ti OR 'radiotherapy, neoadjuvant':ab,kw,ti OR 'neoadjuvant radiation':ab,kw,ti OR 'neoadjuvant radiations':ab,kw,ti OR 'radiation, neoadjuvant':ab,kw,ti OR 'neoadjuvant radiation treatment':ab,kw,ti OR 'neoadjuvant radiation treatments':ab,kw,ti OR 'radiation treatment, neoadjuvant':ab,kw,ti OR 'treatment, neoadjuvant radiation':ab,kw,ti OR 'neoadjuvant radiation therapy':ab,kw,ti OR 'neoadjuvant radiation therapies':ab,kw,ti OR 'radiation therapy, neoadjuvant':ab,kw,ti OR 'therapy, neoadjuvant radiation':ab,kw,ti	235,834
2	'hepatocellular carcinoma' OR 'hcc'	'hepatocellular carcinoma' OR 'hcc' OR 'carcinomas, hepatocellular':ab,kw,ti OR 'hepatocellular carcinomas':ab,kw,ti OR 'hepatocellular carcinoma':ab,kw,ti OR 'hepatoma':ab,kw,ti OR 'hepatomas':ab,kw,ti OR 'liver cancer, adult':ab,kw,ti OR 'adult liver cancer':ab,kw,ti OR 'adult liver cancers':ab,kw,ti OR 'cancer, adult liver':ab,kw,ti OR 'cancers, adult liver':ab,kw,ti OR 'liver cancers, adult':ab,kw,ti OR 'liver cell carcinoma':ab,kw,ti OR 'carcinoma, liver cell':ab,kw,ti OR 'carcinomas, liver cell':ab,kw,ti OR 'cell carcinoma, liver':ab,kw,ti OR 'cell carcinomas, liver':ab,kw,ti OR 'liver cell carcinomas':ab,kw,ti OR 'liver cell carcinoma, adult':ab,kw,ti	237,072
3	'portal vein tumor thrombus' OR 'pvtt'	'portal vein tumor thrombus' OR 'pvtt'	2036
4	#1 AND #2 AND #3	#1 AND #2 AND #3	1031

Search number	Query	Search Details	Results
1	neoadjuvant therapies OR neoadjuvant chemotherapy OR neoadjuvant radiation OR neoadjuvant chemoradiotherapy OR interventional therapy OR targeted therapy OR immunotherapy	(Neoadjuvant Therapies):ti,ab,kw OR (Therapy, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Treatment):ti,ab,kw OR (Neoadjuvant Treatments):ti,ab,kw OR (Treatment, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemotherapy):ti,ab,kw OR (Chemotherapy, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemotherapies):ti,ab,kw OR (Neoadjuvant Chemotherapy Treatment):ti,ab,kw OR (Chemotherapy Treatment, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemotherapy Treatments):ti,ab,kw OR (Treatment, Neoadjuvant Chemotherapy):ti,ab,kw OR (Neoadjuvant Chemoradiotherapy):ti,ab,kw OR (Chemoradiotherapy, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemoradiotherapies):ti,ab,kw OR (Neoadjuvant Chemoradiation):ti,ab,kw OR (Chemoradiation, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemoradiations):ti,ab,kw OR (Neoadjuvant Chemoradiation Therapy):ti,ab,kw OR (Chemoradiation Therapy, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemoradiation Therapies):ti,ab,kw OR (Therapy, Neoadjuvant Chemoradiation):ti,ab,kw OR (Neoadjuvant Chemoradiation Treatment):ti,ab,kw OR (Chemoradiation Treatment, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Chemoradiation Treatments):ti,ab,kw OR (Treatment, Neoadjuvant Chemoradiation):ti,ab,kw OR (Neoadjuvant Systemic Therapy):ti,ab,kw OR (Neoadjuvant Systemic Therapies):ti,ab,kw OR (Systemic Therapy, Neoadjuvant):ti,ab,kw OR (Therapy, Neoadjuvant Systemic):ti,ab,kw OR (Neoadjuvant Systemic Treatment):ti,ab,kw OR (Neoadjuvant Systemic Treatments):ti,ab,kw OR (Systemic Treatment, Neoadjuvant):ti,ab,kw OR (Treatment, Neoadjuvant Systemic):ti,ab,kw OR (Neoadjuvant Radiotherapy):ti,ab,kw OR (Neoadjuvant Radiotherapies):ti,ab,kw OR (Radiotherapy, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Radiation):ti,ab,kw OR (Neoadjuvant Radiations):ti,ab,kw OR (Radiation, Neoadjuvant):ti,ab,kw OR (Neoadjuvant Radiation Treatment):ti,ab,kw OR (Neoadjuvant Radiation Treatments):ti,ab,kw OR (Radiation Treatment, Neoadjuvant):ti,ab,kw OR (Treatment, Neoadjuvant Radiation):ti,ab,kw OR (Neoadjuvant Radiation Therapy):ti,ab,kw OR (Neoadjuvant Radiation Therapies):ti,ab,kw OR (Radiation Therapy, Neoadjuvant):ti,ab,kw OR (Therapy, Neoadjuvant Radiation):ti,ab,kw OR (interventional therapy):ti,ab,kw OR (targeted therapy):ti,ab,kw OR (immunotherapy):ti,ab,kw	13979
2	hepatocellular carcinoma OR HCC	(Carcinomas, Hepatocellular):ti,ab,kw OR (Hepatocellular Carcinomas):ti,ab,kw OR (Hepatocellular Carcinoma):ti,ab,kw OR (Hepatoma):ti,ab,kw OR (Hepatomas):ti,ab,kw OR (Liver Cancer, Adult):ti,ab,kw OR (Adult Liver Cancer):ti,ab,kw OR (Adult Liver Cancers):ti,ab,kw OR (Cancer, Adult Liver):ti,ab,kw OR (Cancers, Adult Liver):ti,ab,kw OR (Liver Cancers, Adult):ti,ab,kw OR (Liver Cell Carcinoma):ti,ab,kw OR (Carcinoma, Liver Cell):ti,ab,kw OR (Carcinomas, Liver Cell):ti,ab,kw OR (Cell Carcinoma, Liver):ti,ab,kw OR (Cell Carcinomas, Liver):ti,ab,kw OR (Liver Cell Carcinomas):ti,ab,kw OR (Liver Cell Carcinoma, Adult):ti,ab,kw OR (HCC):ti,ab,kw	13068
3	portal vein tumor thrombus OR PVTT	(portal vein tumor thrombus):ti,ab,kw OR (PVTT):ti,ab,kw	244
4	#1 AND #2 AND #3	#1 AND #2 AND #3	8