

Table S1. Search strategy.

Database	Search strategy
PubMed	#1 "Carcinoma, Hepatocellular"[Mesh] #2 (((((hepatocellular caricoma) OR hepatocarcinoma) OR hepatoma) OR HCC) OR "primary liver cancer") OR ((carcinoma*) AND ((hepat*) OR liver)) #3 #1 OR #2 #4 "Neutrophil-Lymphocyte ratio" #5 "Neutrophil Lymphocyte ratio" #6 "Neutrophil-to-Lymphocyte ratio" #7 "Neutrophil to Lymphocyte ratio" #8 "Neutrophil/Lymphocyte ratio" #9 NLR #10 #4 OR #5 OR #6 OR #7 OR #8 OR #9 #11 #3 AND #10
Embase	#1 'liver cell carcinoma'/exp #2 (((((hepatocellular caricoma) OR hepatocarcinoma) OR hepatoma) OR HCC) OR "primary liver cancer") OR ((carcinoma*) AND ((hepat*) OR liver)) #3 #1 OR #2 #4 "Neutrophil-Lymphocyte ratio" #5 "Neutrophil Lymphocyte ratio" #6 "Neutrophil-to-Lymphocyte ratio" #7 "Neutrophil to Lymphocyte ratio" #8 "Neutrophil/Lymphocyte ratio" #9 NLR #10 #4 OR #5 OR #6 OR #7 OR #8 OR #9 #11 #3 AND #10

Table S2. Characteristics of included studies.

First author	Publication year	country	Study design	Total cases	Group	Cases	Age	Sex (M/F)
Gomez	2008	England	RCS	96	NLR \geq 5	26	-	-
					NLR < 5	70	-	-
Huang	2010	China	RCS	145	NLR \geq 3.3	59	47.81	54/5
					NLR < 3.3	86	50.13	80/6
Fan	2014	China	RCS	132	NLR \geq 3.1	53	-	37/16
					NLR < 3.1	79	-	50/29
Zhou	2014	China	RCS	279	NLR > 2.6	140	-	124/16
					NLR \leq 2.6	139	-	127/12
Huang	2015	China	RCS	508	NLR > 2.33	254	57.0 \pm 11.5	213/41
					NLR \leq 2.33	254	56.0 \pm 10.4	219/35
Hu	2016	Korea	RCS	213	NLR \geq 1.5	120	54.6 \pm 9.94	93/37
					NLR < 1.5	93	53.1 \pm 9.63	73/20
Fu	2017	China	RCS	130	NLR > 1.84	75	-	71/4
					NLR \leq 1.84	55	-	50/5
Hung	2017	China	RCS	672	NLR > 2.5	217	-	161/56
					NLR \leq 2.5	455	-	368/87
Pang	2017	China	RCS	470	NLR > 2.53	184	52.7 \pm 11.4	148/36
					NLR \leq 2.53	286	51.9 \pm 9.8	223/63
Yang	2017	China	RCS	1020	NLR \geq 2.8	237	-	205/32
					NLR < 2.8	783	-	676/107
Rungsakulkij	2018	Thailand	RCS	310	NLR \geq 1.8	157	-	-
					NLR < 1.8	153	-	-
Shen	2018	China	RCS	1135	NLR > 2.8	362	-	-

					NLR \leq 2.8	773	-	-
Zheng	2017	America	CCS	370	MVI group	173	65 \pm 13	130/43
					No MVI group	197	66 \pm 11	141/56
Zhu	2018	China	CCS	165	MVI group	54	50.07 \pm 11.83	46/8
					No MVI group	111	53.59 \pm 11.85	93/18
Li	2018	China	CCS	627	MVI group	174	53.58 \pm 11.81	149
					No MVI group	453	56.93 \pm 11.37	383

RCS: retrospective cohort study; CCS: case-control study; NLR: neutrophil-lymphocyte ratio; MVI: microvascular invasion.

Table S3. Methodological Quality of Studies Included in the Meta-analysis

First author	Publication years	Study design	Selection	Comparison	Exposure/Outcome	Total quality stars
Gomez	2008	RCS	☆☆☆	-	☆☆☆	6
Huang	2010	RCS	☆☆☆	☆	☆☆☆	7
Fan	2014	RCS	☆☆☆	☆☆	☆☆☆	8
Zhou	2014	RCS	☆☆☆	☆	☆☆☆	8
Huang	2015	RCS	☆☆☆	☆☆	☆☆☆	8
Hu	2016	RCS	☆☆☆	☆	☆☆☆	7
Fu	2017	RCS	☆☆☆	☆☆	☆☆☆	8
Hung	2017	RCS	☆☆☆	☆	☆☆☆	7
Pang	2017	RCS	☆☆☆	☆☆	☆☆☆	8
Yang	2017	RCS	☆☆☆	☆	☆☆☆	7
Rungsakulkij	2018	RCS	☆☆☆	-	☆☆☆	6
Shen	2018	RCS	☆☆☆	-	☆☆☆	6
Zheng	2017	CCS	☆☆☆	☆☆	☆☆	7
Li	2008	CCS	☆☆☆	☆☆	☆☆	7
Zhu	2018	CCS	☆☆☆	☆	☆☆	6

RCS: retrospective cohort study; CCS: case-control study.