

Table S1 Comparison of HR for different endpoint associated with treatment reported in the literature with marriage in LC patients

Author, year	Study type	Reference	Treatment	Study population	Adjusted HR (95% CI)
Llovet <i>et al.</i> , 2002 (36)	Randomized controlled trial	Conservative treatment	Chemoembolisation (gelatin sponge, doxorubicin)	Child-Pugh class A or B, n=112	Overall mortality: 0.47 (0.25–0.91)
Bai <i>et al.</i> , 2013 (37)	Prospective non-randomized controlled trial	TACE	Sorafenib plus TACE	Unresectable intermediate or advanced HCC, n=304	Time-to-progression: 0.60 (0.42–0.85); median survival time: 0.61 (0.42–0.88)
Bruix <i>et al.</i> , 2017 (38)	Randomised, double-blind, parallel-group, phase 3 trial	Placebo	Regorafenib	Advanced HCC, n=843	Overall survival: 0.63 (0.50–0.79)
Cheng <i>et al.</i> , 2009 (39)	Multinational phase III, randomised, double-blind, placebo-controlled trial	Placebo	Sorafenib	Unresectable or metastatic hepatocellular carcinoma, n=304	Median survival time: 0.68 (0.50–0.93); median time to progression: 0.57 (0.42–0.79)
Kudo <i>et al.</i> , 2018 (40)	Open-label, randomised, phase 3 trial	Sorafenib	Sorafenib plus hepatic arterial infusion chemotherapy	Advanced and not suitable for resection, local ablation, or transarterial chemoembolization, n=205	Median survival time: 1.01 (0.74–1.37)
Pinter <i>et al.</i> , 2015 (41)	Randomized controlled trial, double-blind	TACE plus placebo	TACE plus doxorubicin	Early or intermediate HCC, n=40	Median survival time: 1.70 (0.80–3.60)
–	This study	Married	Non-married	AJCC III HCC, n=3,794	CSM: 1.26 (1.10–1.45)

HR, hazard ratio; LC, liver cancer; CI, confidence interval; TACE, transcatheter arterial chemoembolization; BCLC, Barcelona clinic liver cancer; CSM, cancer-specific mortality.

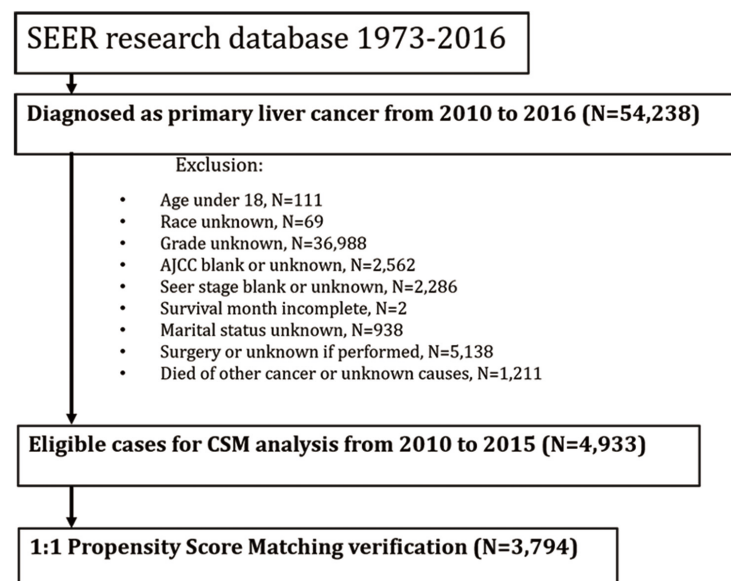


Figure S1 Flowchart of the enrolled patients in the study. SEER, Surveillance, Epidemiology, and End Results; CSM, cancer-specific mortality.

References

36. Llovet JM, Real MI, Montana X, et al. Arterial embolisation or chemoembolisation versus symptomatic treatment in patients with unresectable hepatocellular carcinoma: a randomised controlled trial. *Lancet* 2002;359:1734-9.
37. Bai W, Wang YJ, Zhao Y, et al. Sorafenib in combination with transarterial chemoembolization improves the survival of patients with unresectable hepatocellular carcinoma: a propensity score matching study. *J Dig Dis* 2013;14:181-90.
38. Bruix J, Qin S, Merle P, et al. Regorafenib for patients with hepatocellular carcinoma who progressed on sorafenib treatment (RESORCE): a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet* 2017;389:56-66.
39. Cheng AL, Kang YK, Chen Z, et al. Efficacy and safety of sorafenib in patients in the Asia-Pacific region with advanced hepatocellular carcinoma: a phase III randomised, double-blind, placebo-controlled trial. *Lancet Oncol* 2009;10:25-34.
40. Kudo M, Ueshima K, Yokosuka O, et al. Sorafenib plus low-dose cisplatin and fluorouracil hepatic arterial infusion chemotherapy versus sorafenib alone in patients with advanced hepatocellular carcinoma (SILIUS): a randomised, open label, phase 3 trial. *Lancet Gastroenterol Hepatol* 2018;3:424-32.
41. Pinter M, Ulbrich G, Sieghart W, et al. Hepatocellular carcinoma: a phase II randomized controlled double-blind trial of transarterial chemoembolization in combination with biweekly intravenous administration of bevacizumab or a placebo. *Radiology* 2015;277:903-12.