("Pembrolizumab"[Title/Abstract] OR "Ipilimumab"[Title/Abstract] OR "Atezolizumab"[Title/Abstract] OR "Nivolumab"[Title/Abstract] OR "Immunotherapy"[Title/Abstract] OR "Camrelizumab"[Title/Abstract]) AND (("phase III"[Title/Abstract] OR "phase II"[Title/Abstract] OR "phase 3"[Title/Abstract] OR "phase 2"[Title/Abstract]) AND "hepatocellular carcinoma"[Title/Abstract]) AND 2000/01/01:2022/08/31[Date - Publication]

40 potentially relevant articles

25 excluded articles:
Non-clinical trial (8)
Phase I trial (5)
Single arm trial (5)
Updates (5)
Non survival analysis (2)

15 relevant articles

7 excluded articles due to missing essential information

8 eligible aritcles

Figure S1 Literature search process.

Table S1 Characteristics of the included studies

Immunotherapy trial	Study type	Funding source	Analysis population	HR estimate	Stratified HR
CIK cell					
Lee *et al*., [2015] (9)	Interventional	Industry	ITT	Cox PH model	Reported
Takayama *et al*., [2000] (10)	Interventional	Government	ITT	Cox PH model	Not reported
Xu *et al*., [2016] (11)	Interventional	Government	ITT	Aalen's linear hazard models	Not reported
Checkpoint inhibitor					
Finn *et al*., [2020a] (12)	Interventional	Industry	ITT	Cox PH model	Not reported
Finn *et al*., [2020b] (13)	Interventional	Industry	ITT	Cox PH model	Reported
Kelley *et al*., [2022] (14)	Interventional	Industry	ITT	Cox PH model	Not reported
Qin *et al*., [2020] (15)	Interventional	Industry	ITT	Cox PH model	Reported
Yau *et al*., [2022] (16)	Interventional	Industry	ITT	Cox PH model	Not reported

HR, hazard ratio; CIK, cytokine-induced killer; ITT, intention-to-treat; PH, proportional hazards.
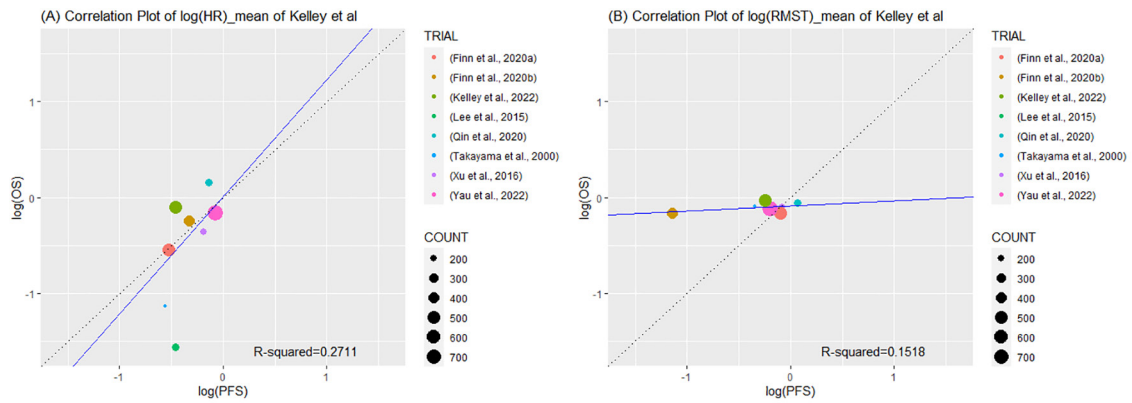
Figure S2 Correlations between PFS and OS with the average sample size being the weight of the study conducted by (14). (A) HR; (B) RMST ratio. PFS, progression-free survival; OS, overall survival; HR, hazard ratio; RMST, restricted mean survival time.
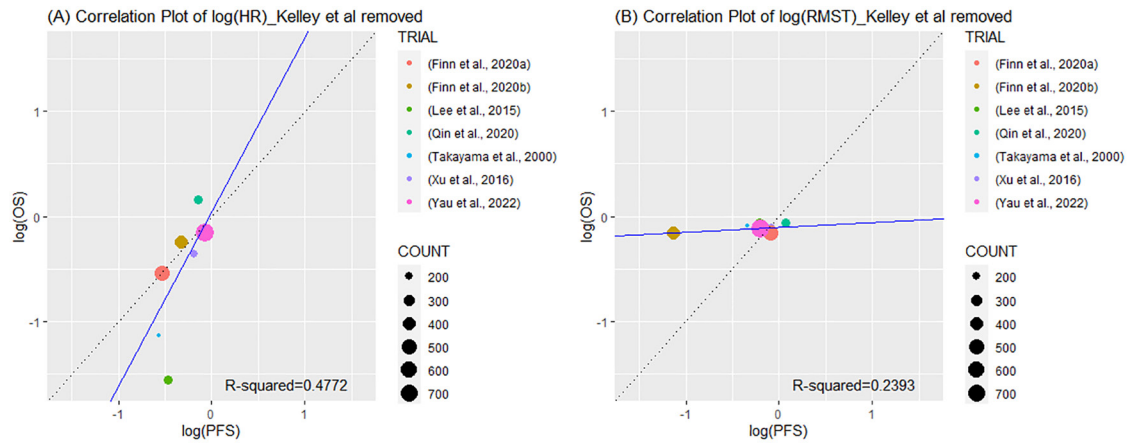

Figure S3 Correlations between PFS and OS after excluding the study conducted by (14). (A) HR; (B) RMST ratio. PFS, progression-free survival; OS, overall survival; HCC, hepatocellular carcinoma; HR, hazard ratio; RMST, restricted mean survival time.