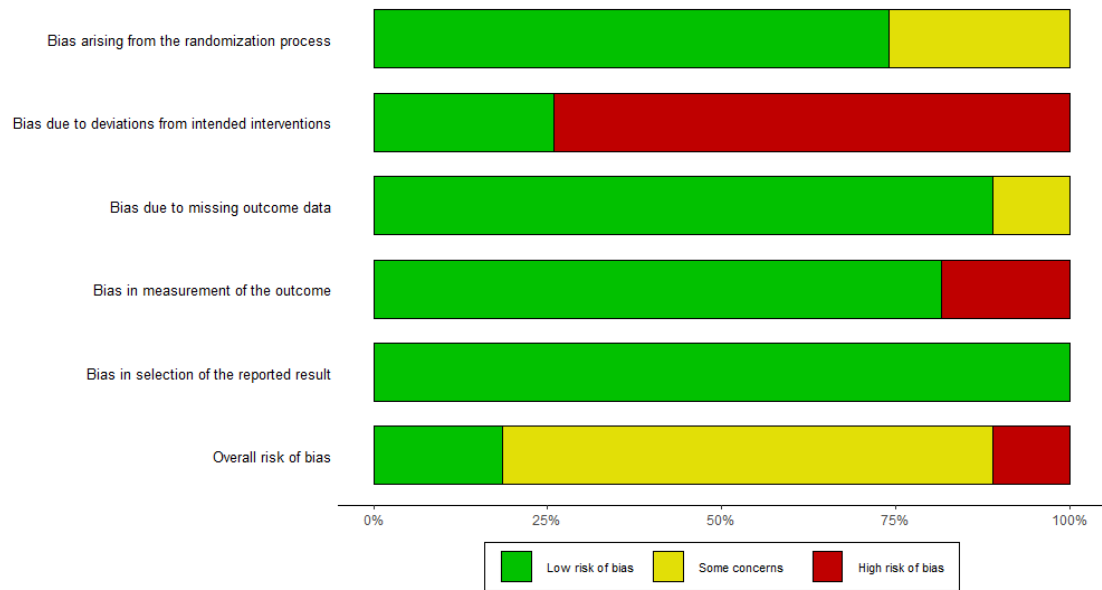


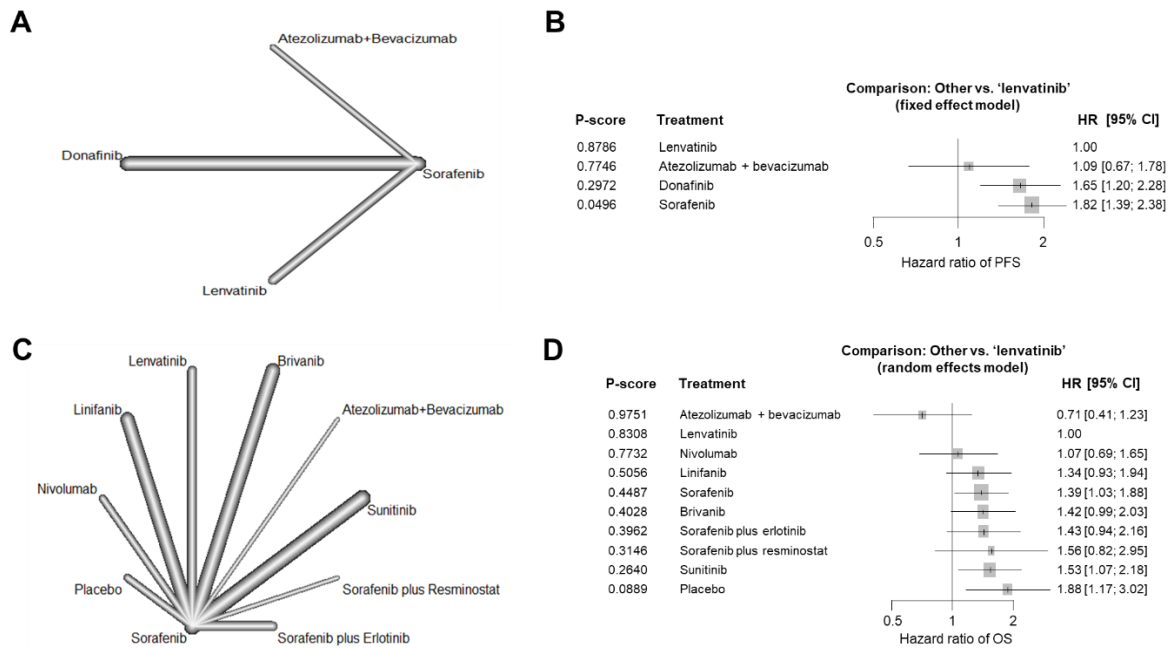
SUPPLEMENTAL MATERIAL

Supplemental Figure 1 Assessment of bias in the included studies

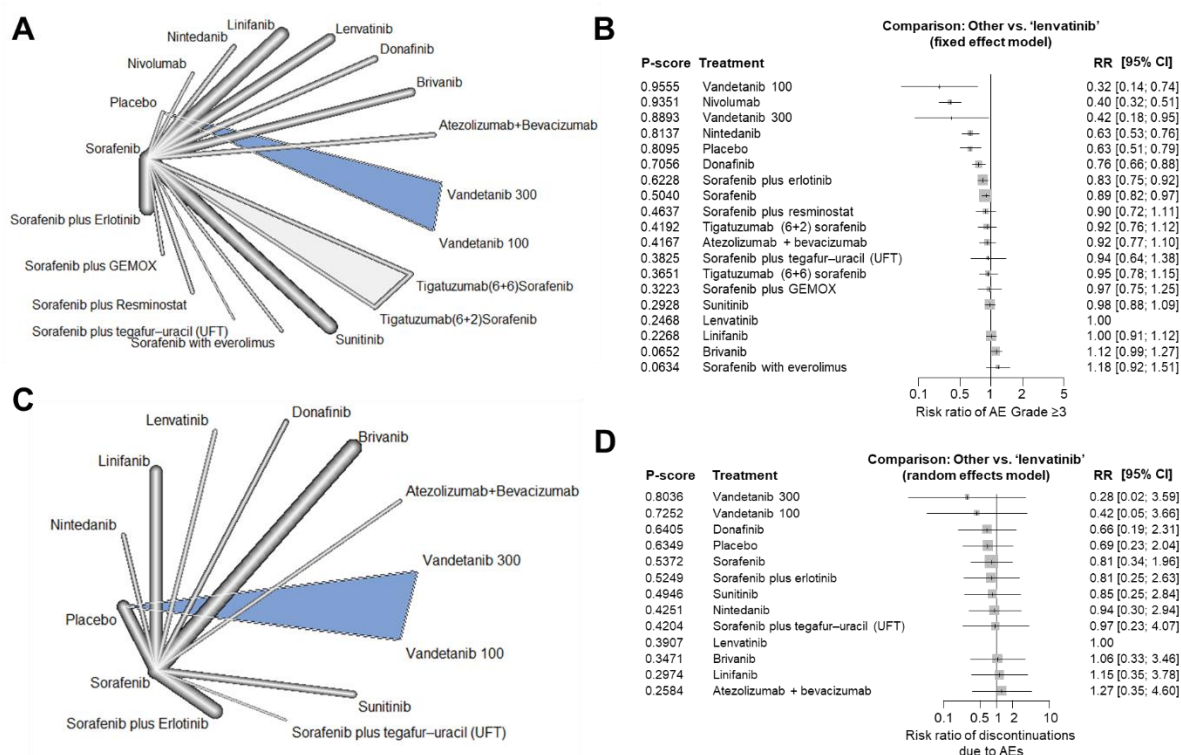


Supplemental Figure 2 Survival outcomes in patients with HBV infection and advanced HCC following first-line systemic therapy. Network diagrams (A, C) and interventions ranked by P-score with corresponding hazard ratios for progression-free survival (B) and overall survival (D) for each treatment versus lenvatinib

CI, confidence interval; HR, hazard ratio; OS, overall survival; PFS, progression-free survival.



Supplemental Figure 3 Safety of first-line systemic therapy in patients with advanced HCC. Network diagrams (A, C) and interventions ranked by P-score with risk ratios for incidence of Grade ≥ 3 adverse events (B; Note: highest rank indicates lowest incidence of adverse events) and discontinuations due to adverse events (D; Note: highest rank indicates lowest incidence of discontinuations due to adverse events) AE, adverse event; CI, confidence interval; GEMOX, gemcitabine and oxaliplatin; RR, risk ratio.



Supplemental Table 1 Study design characteristics

| First author/year | Sequence generation | Concealment of allocation | Blinding adjudication | Incomplete outcome data addressed | Free of selective reporting | Free of other bias |
|--------------------------------------|----------------------------|----------------------------------|---|--|------------------------------------|---------------------------|
| Yen 2018^[47] | System | Open label | CIR | Flow chart | Free | Free |
| Ciuleanu 2016^[48] | Randomized | Double blind | BICR | Flow chart | Free | Free |
| Fin 2020^[11] | System | Open label | Independent review facility | NA | NA | NA |
| Abou-Alfa 2010^[49] | System | Double blind | BICR | Flow chart | Free | Free |
| Cheng 2016^[50] | Randomized | Open label | OS/local investigator/local and central | Flow chart | Free | Free |
| Cheng 2015^[28] | System | Open label | BICR | Flow chart | Free | Free |
| Hsu 2012^[51] | System | Double blind | RECIST | Flow chart | Free | Free |
| Johnson 2013^[22] | System | Double blind | RECIST | Flow chart | Free | Free |
| Cainap 2015^[24] | System | Open label | OS/RECIST | Flow chart | Free | Free |
| Kudo 2018^[10] | System | Open label | OS/local investigator | Flow chart | Free | Free |
| Yau 2019^[23] | NA | Open label | OS | NA | NA | |
| Cheng 2013^[29] | System | Open label | OS/RECIST | Flow chart | Free | Free |
| Zhu 2015^[26] | System | Double blind | OS/RECIST | Flow chart | Free | Free |

| | | | | | | |
|---------------------------------------|------------|--------------|-----------------|---------------|------|------|
| Llovet 2008 ^[52] | System | Double blind | OS/independent | Flow chart | Free | Free |
| Cheng 2009 ^[25] | System | Double blind | OS/independent | Flow chart | Free | Free |
| Palmer 2018 ^[53] | System | Open label | TTP/CIR | Flow chart | Free | Free |
| Thomas 2018 ^[54] | Randomized | Open label | OS | Flow chart | Free | Free |
| Abou-Alfa 2019 ^[55] | System | Unblinded | OS DSMB | Flow chart | Free | Free |
| Tak 2018 ^[27] | System | NA | TTP | Flow chart | Free | Free |
| Jouve 2019 ^[56] | System | Open label | OS | Flow chart | Free | Free |
| Lee 2016 ^[57] | Randomized | Open label | PFS | No flow chart | Free | Free |
| Assenat 2019 ^[58] | System | Open label | PFS | Flow chart | Free | Free |
| Azim 2018 ^[59] | System | Open label | TTP independent | No flow chart | Free | Free |
| Koeberle 2016 ^[60] | Randomized | Open label | Independent | Flow chart | Free | Free |
| Bi 2020 ^[17] | Randomized | Open label | OS | Flow chart | Free | Free |
| Qin 2013 ^[61] | System | Open label | OS | Flow chart | Free | Free |
| Yeo 2005 ^[62] | Randomized | Open label | OS | Flow chart | Free | Free |

BICR, blinded independent central review; CIR, central independent review; NA, not reported; OS, overall survival; PFS, progression-free survival; RECIST, response evaluation in solid tumors; TTP, time-to-progression.

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