

## **Supplementary Materials**

### **Supplementary Method**

Literature search strategy and criteria

((central venous catheter[title/abstract] OR central venous access[title/abstract] OR central line[title/abstract] OR Hickman[title/abstract] OR Hickman catheter[title/abstract] OR PORT[title/abstract] OR Port-a-cath[title/abstract] OR PORT catheter[title/abstract] OR PICC[title/abstract] OR peripherally inserted central catheter[title/abstract] AND cancer[title/abstract] OR cancers[title/abstract] AND palliative care[title/abstract] OR terminally ill[title/abstract] OR critically ill[title/abstract]))) AND ("0001/01/01"[Date - Publication] : "2023/04/30"[Date - Publication])

### **PICOS framework for systematic review and meta-analysis**

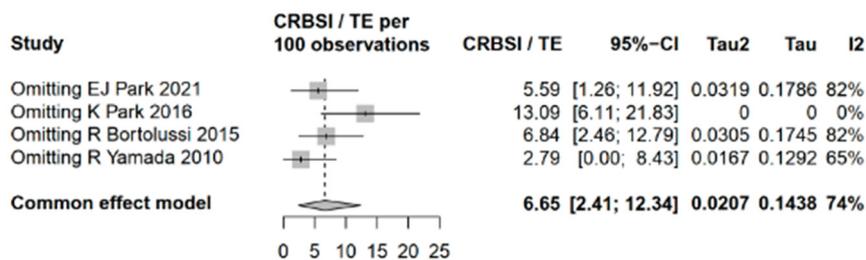
P (Patient or population) – Cancer patients receiving palliative care or best supportive care

I (Intervention) – Insertion of central venous access devices

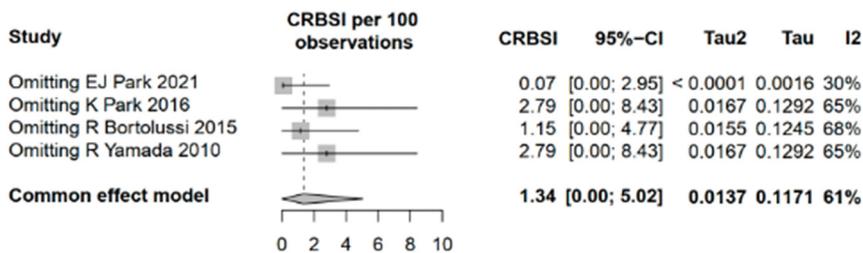
C (Comparison) – Comparison of various types of central venous access devices including peripherally inserted catheter, central line or totally imported port

O (Outcome) – Complications related to insertion of central venous access devices including overall complication rate, rate of catheter-related bloodstream infection, and rate of thromboembolism

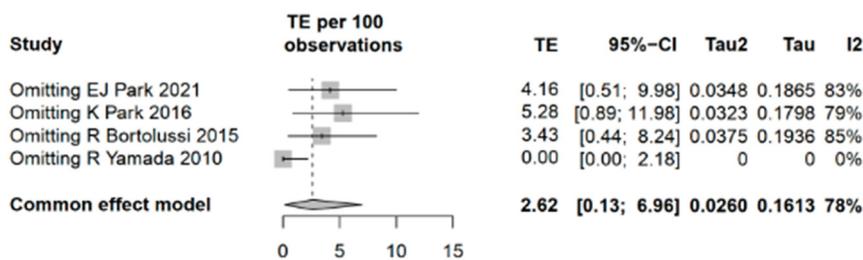
S (Study design) – Systematic review and meta-analysis



(a)



(b)



(c)

**Supplementary Figure S1.** Forest plot showing leave-one-out meta-analysis for PICC in (a) catheter-related bloodstream infection (CRBSI) and thromboembolism (TE), (b) CRBSI, and (c) TE.