

Figure S1 PRISMA flow diagram illustrating study selection. *, the initial literature search was conducted in PubMed and EMBASE in August 2025 using the terms “tricuspid” AND (“surgery” OR “repair” OR “replacement”), with filters for English-language full-text studies published between 2005 and 2025. This search yielded 12,386 articles in PubMed and 316 articles in EMBASE, after removal of duplicates. The studies were then screened according to the predefined inclusion and exclusion criteria of the study. PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

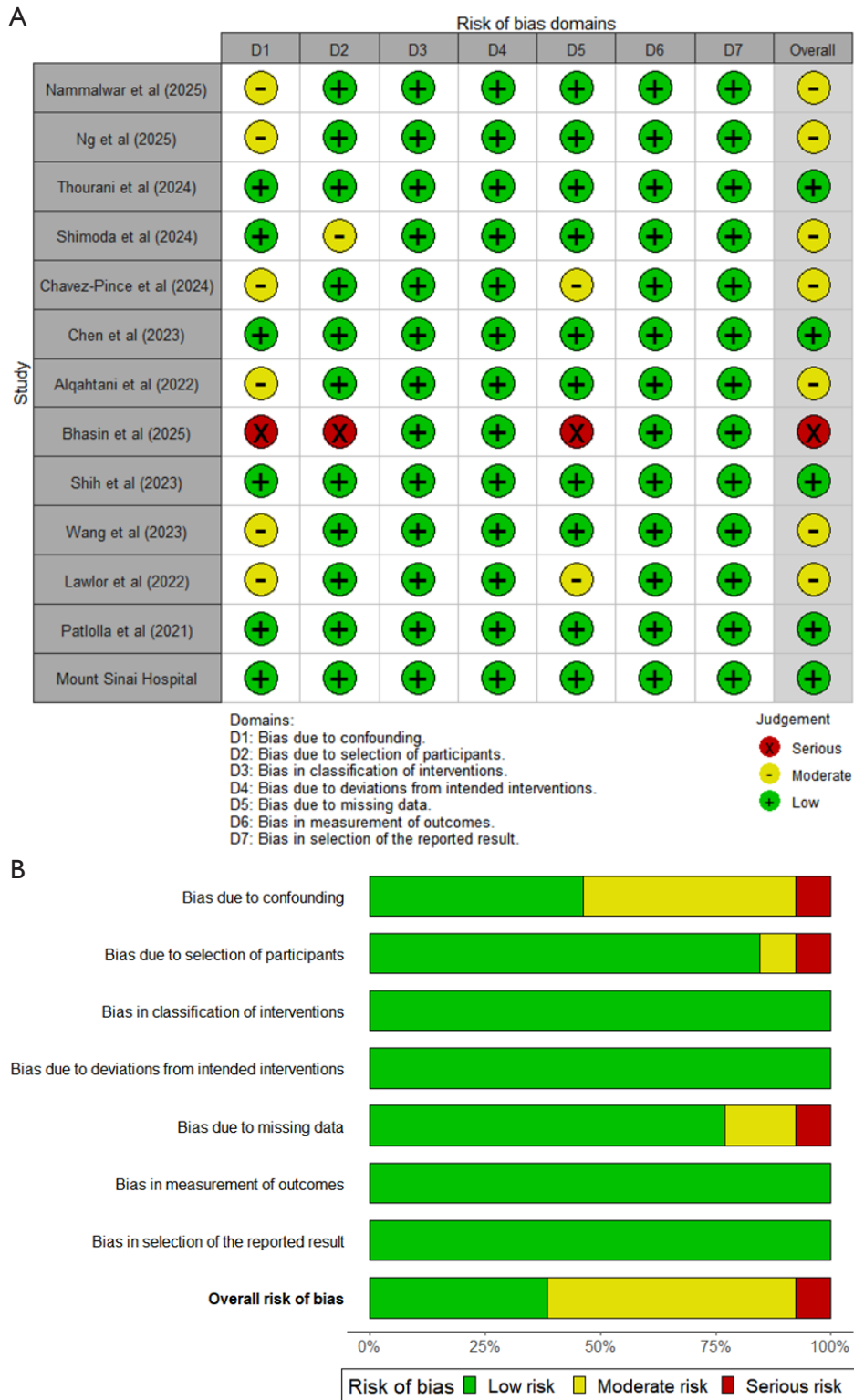


Figure S2 Risk of bias assessment for observational studies. ROBINS-I tool from the Cochrane Handbook was used to assess risk of bias for outcomes of operative mortality and incidence of PPM implantation. (A) Risk of bias domains per study. (B) Overall risk of bias by domain. PPM, permanent pacemaker; ROBINS-I, Risk of Bias in Non-Randomized Studies of Interventions.

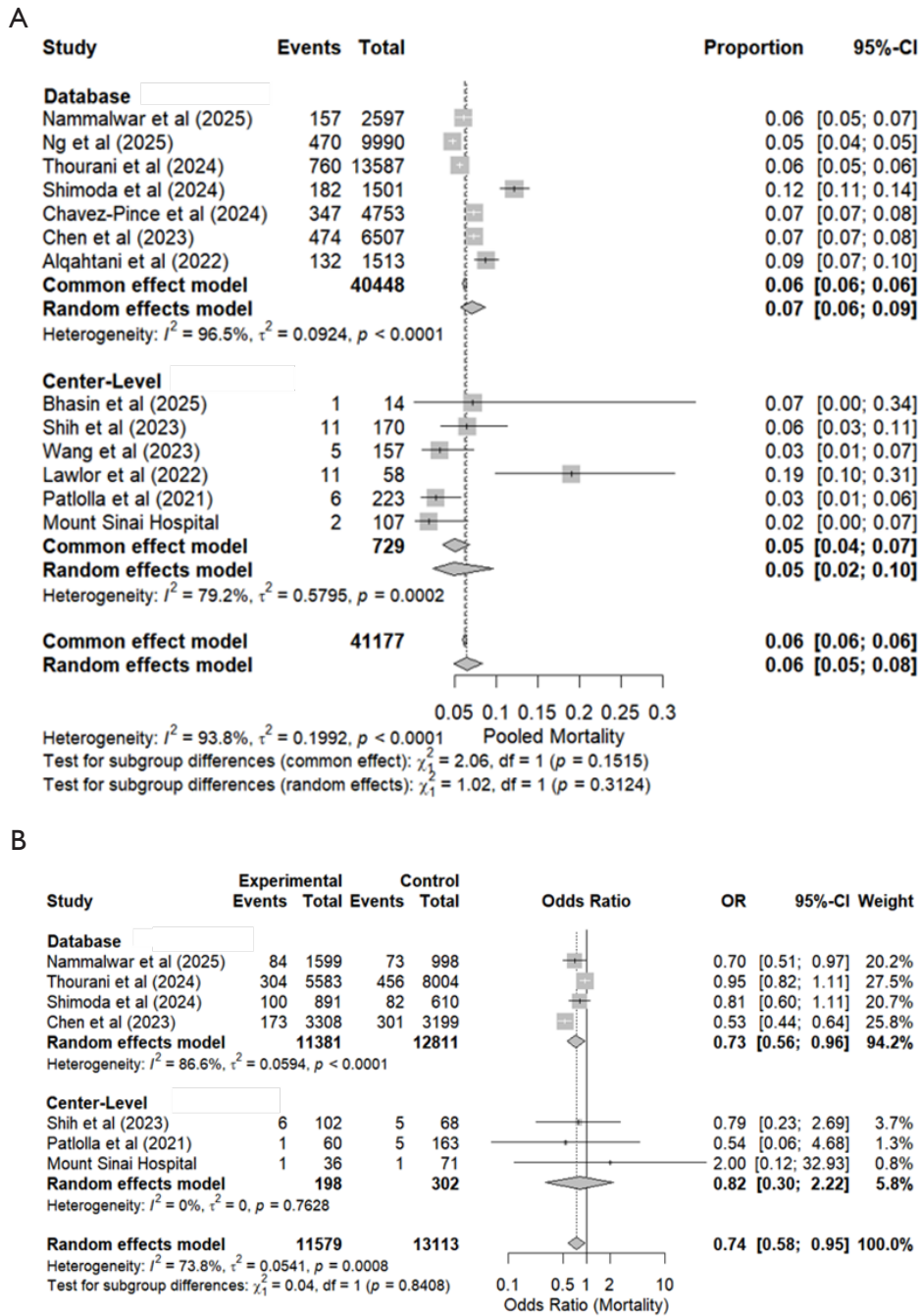
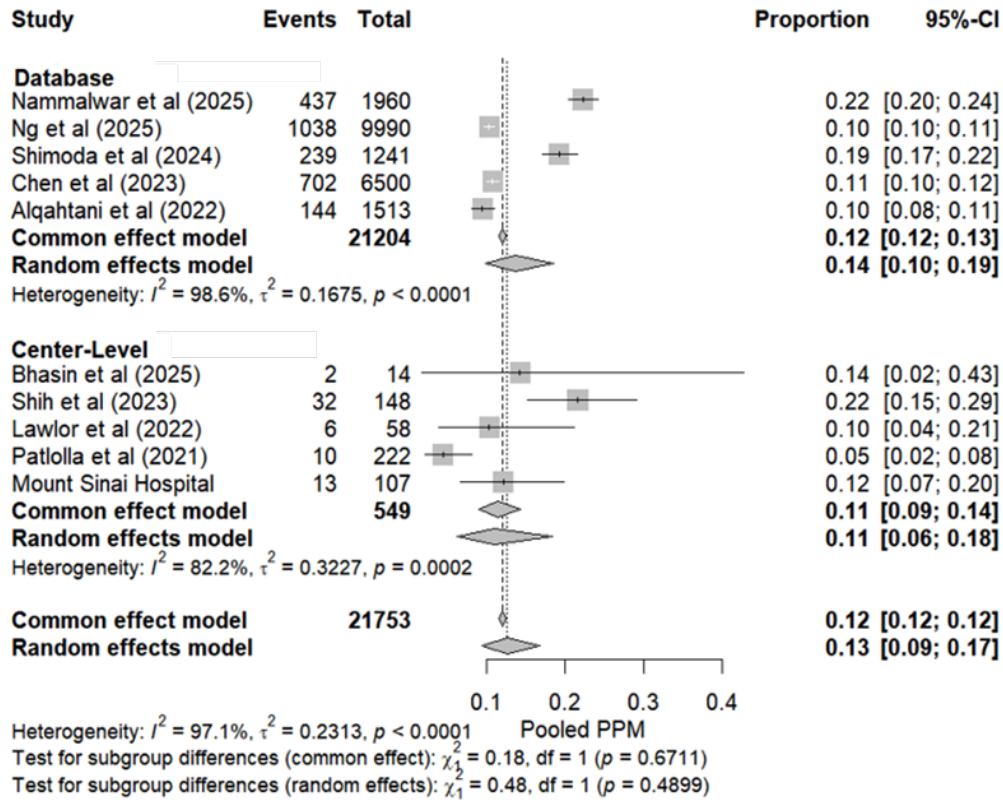


Figure S3 Subgroup analyses of operative mortality after isolated tricuspid surgery by study type: (A) overall pooled incidence; (B) TVr vs. TVR. CI, confidence interval; OR, odds ratio; TVr, tricuspid valve repair; TVR, tricuspid valve replacement.

A



B

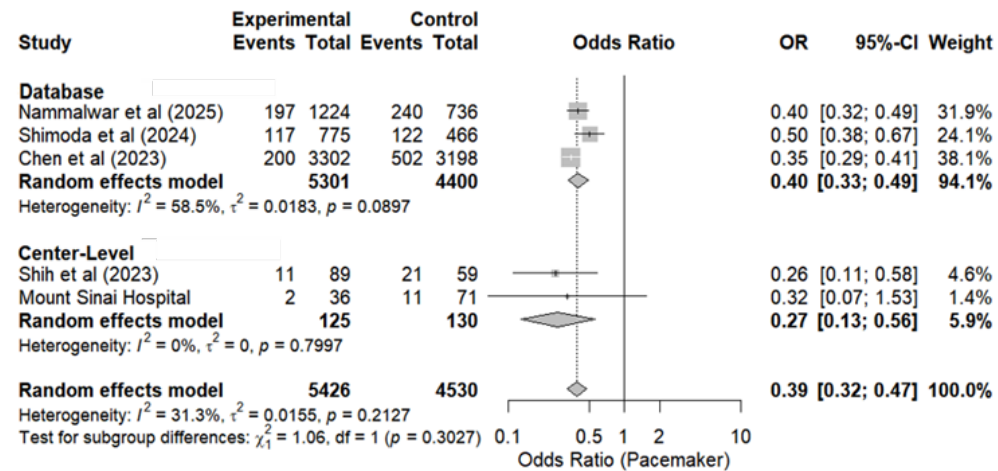


Figure S4 Subgroup analyses for incidence of new PPM after isolated tricuspid surgery by study type: (A) overall pooled incidence; (B) TVr vs. TVR. CI, confidence interval; OR, odds ratio; PPM, permanent pacemaker; TVr, tricuspid valve repair; TVR, tricuspid valve replacement.