

Systematic Review and Meta-Analysis of Randomized Trials: Efficacy, Immunogenicity, and Safety of Dengvax Vaccine

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Background

- Global prevalence of dengue increases in last decades.¹
- Burden of diseases and economics high.²
- No medicine discovered, instead of vaccine.
- Two vaccines already marketed, and one is Dengvax that just approved by FDA this year.
- Aim: systematic review and meta analysis of efficacy, immunogenicity, and safety of dengue vaccine.

Method^{3,4}

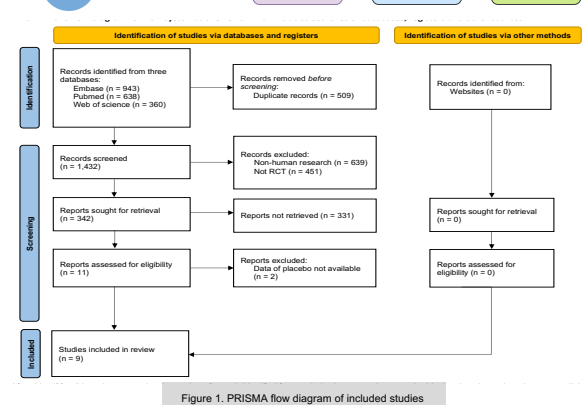


Figure 1. PRISMA flow diagram of included studies

Result

- Percentage agreement 72.7%
- Kappa cohen's 0.421

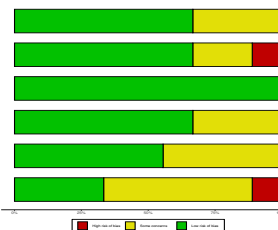


Figure 2. Quality of studies by ROB2

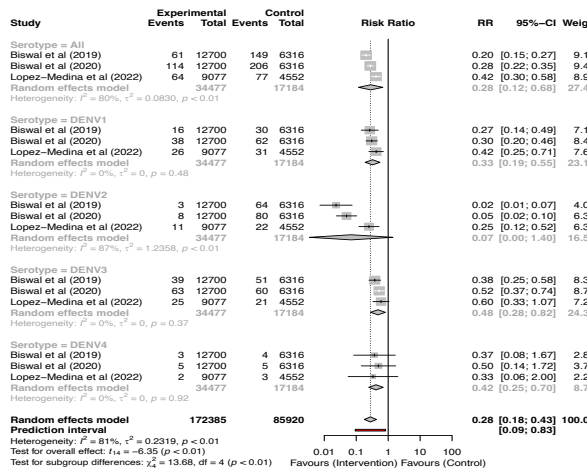


Figure 3. Forest plot of Dengvax's efficacy

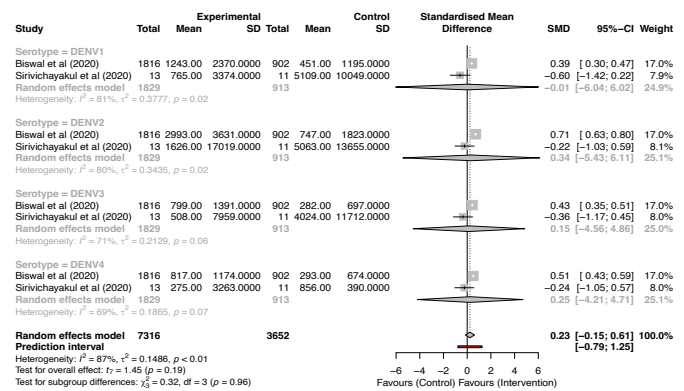


Figure 4. Forest plot of immunogenicity of Dengvax

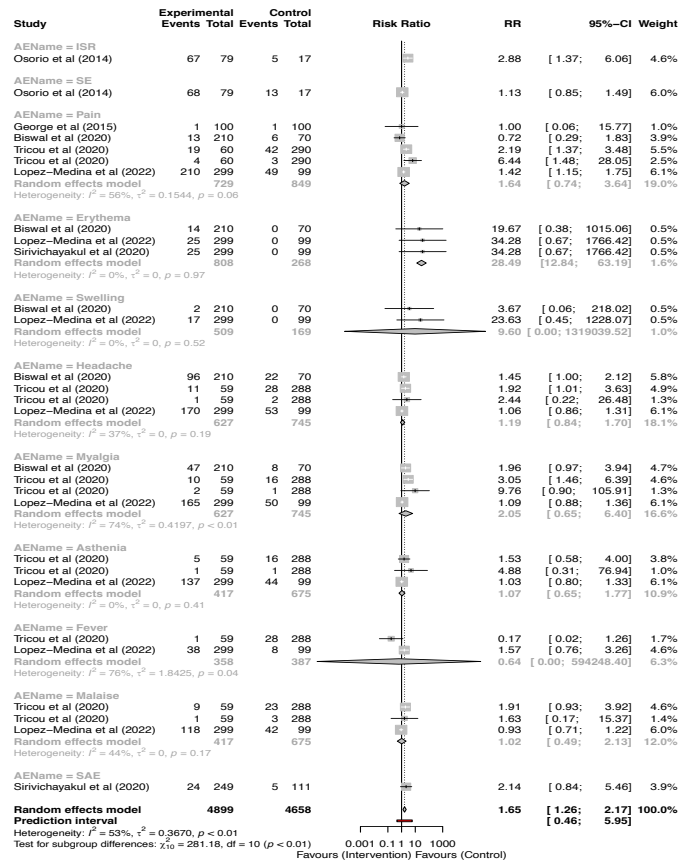


Figure 5. Forest plot of safety of Dengvax

Conclusion

Dengvax displayed efficacy, immunogenicity, and safety results in this study. However, number of studies that selected in the study is less than ten so that further analysis could not be performed (heterogeneity test and publication bias). This study is a part of project systematic review and meta analysis of dengue live attenuated vaccine.

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