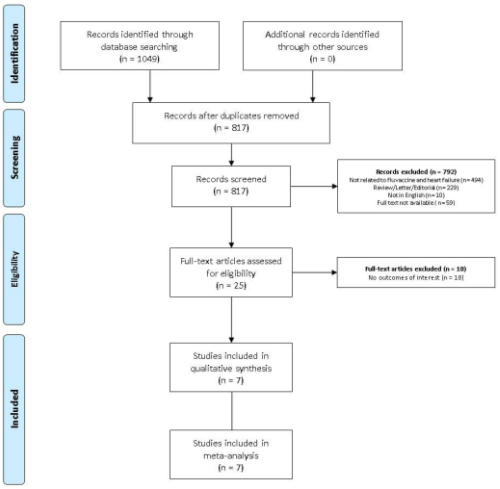
Effects of Influenza Vaccine on Cardiovascular Outcomes in Patients with Heart Failure: Meta-Analysis

Background: Influenza multiplies the risk for mortality and complications among patients with heart failure (HF) and related cardiovascular (CV) conditions. Influenza vaccine protects against flu and its complications, but whether this includes lowering CV death and hospitalization remain unclear. This meta-analysis aims to quantify the effect of influenza vaccination on hospitalization, all-cause mortality, and cardiovascular mortality among patients with HF.
Methods: Electronic databases were searched for studies presenting effects of influenza vaccination in mortality and hospitalization in patients with HF. ***(See figure 1)***
Results: 98884 patients were included from the 7 eligible studies analyzed. Most were males, aged >55 years old. Vaccinated patients had significantly lower risk for cardiovascular mortality [RR=0.8 (0.68,0.94)]. ***(See figure 1)***
Conclusion: Influenza vaccination among HF patients confers significant protection from cardiovascular mortality. The results are driven mostly by observational studies.

A.



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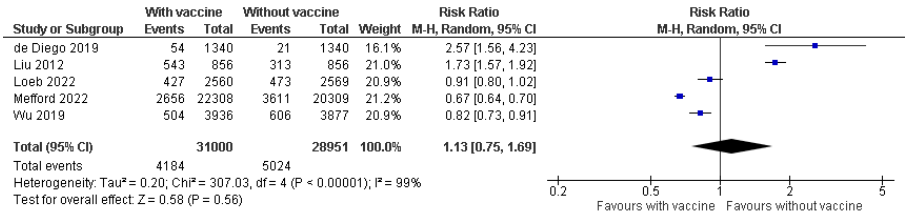
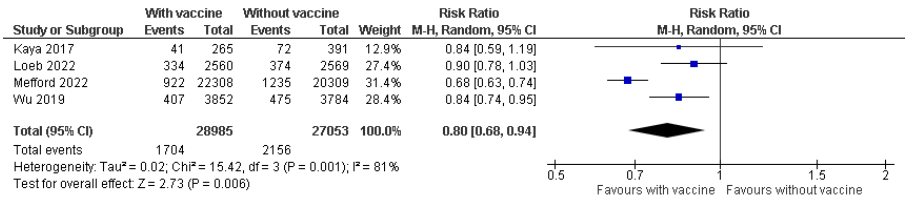


1.



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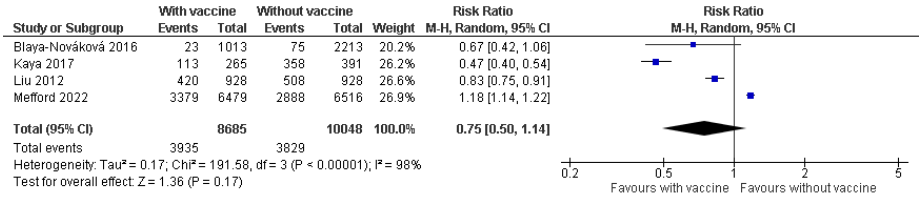

3.

Figure 1: A. PRISMA diagram. B. Forrest plot for 1. All-cause mortality 2. Cardiovascular mortality 3. All-cause hospitalization

Reference:

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