EXPLORING THE IMPACT OF ASPIRIN USE ON AGE-RELATED MACULAR DEGENERATION: A COMPREHENSIVE META-ANALYSIS

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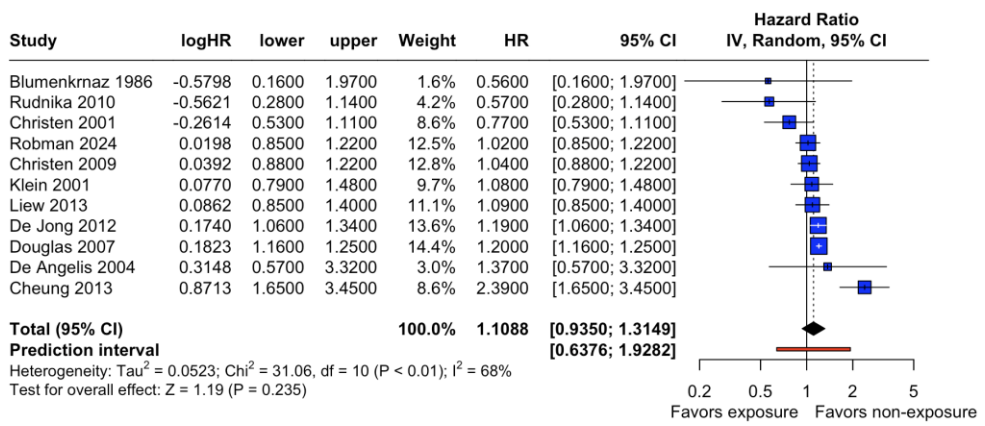
PURPOSE

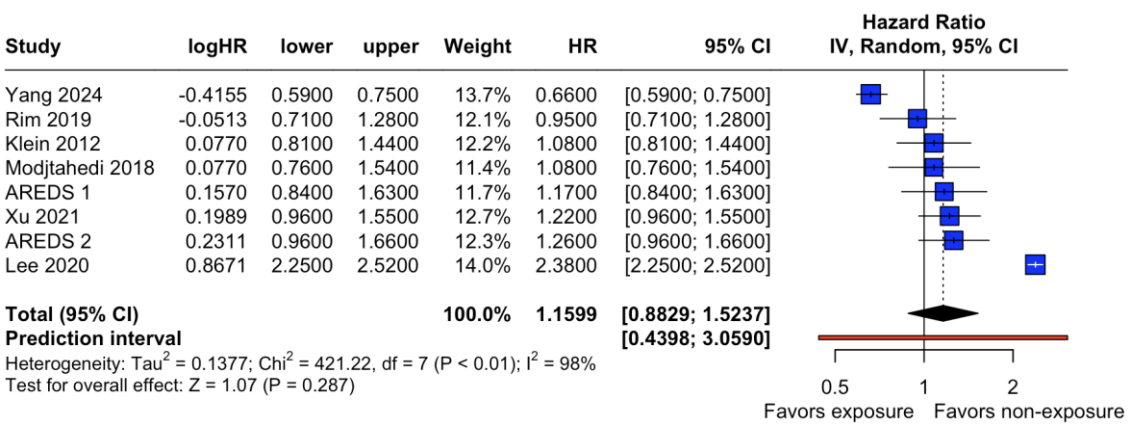
Age-related macular degeneration (AMD) is a leading cause of visual impairment in developed countries. Prior studies have explored the relationship between aspirin use and the onset of AMD; however, the reported effects have been inconsistent. This meta-analysis aims to clarify this issue by systematically evaluating randomized controlled trials (RCTs) and cohort studies.

METHODS

We conducted a comprehensive search of the PubMed, Embase, and Cochrane databases up to September 2024 to identify studies examining the association between aspirin use and the development of AMD. We pooled odds ratios (OR) and hazard ratios (HR), where applicable, for binary outcomes with 95% confidence intervals (CI) using a random-effects model. We performed the prediction score analysis to improve the robustness of our results. All statistical analyses were performed using R version 4.4.1.

RESULTS





CONCLUSIONS

Among patients who regularly use aspirin, the incidence of AMD was comparable to that of patients who do not use the medication, indicating no significant association between aspirin use and the development of AMD.

REFERENCES