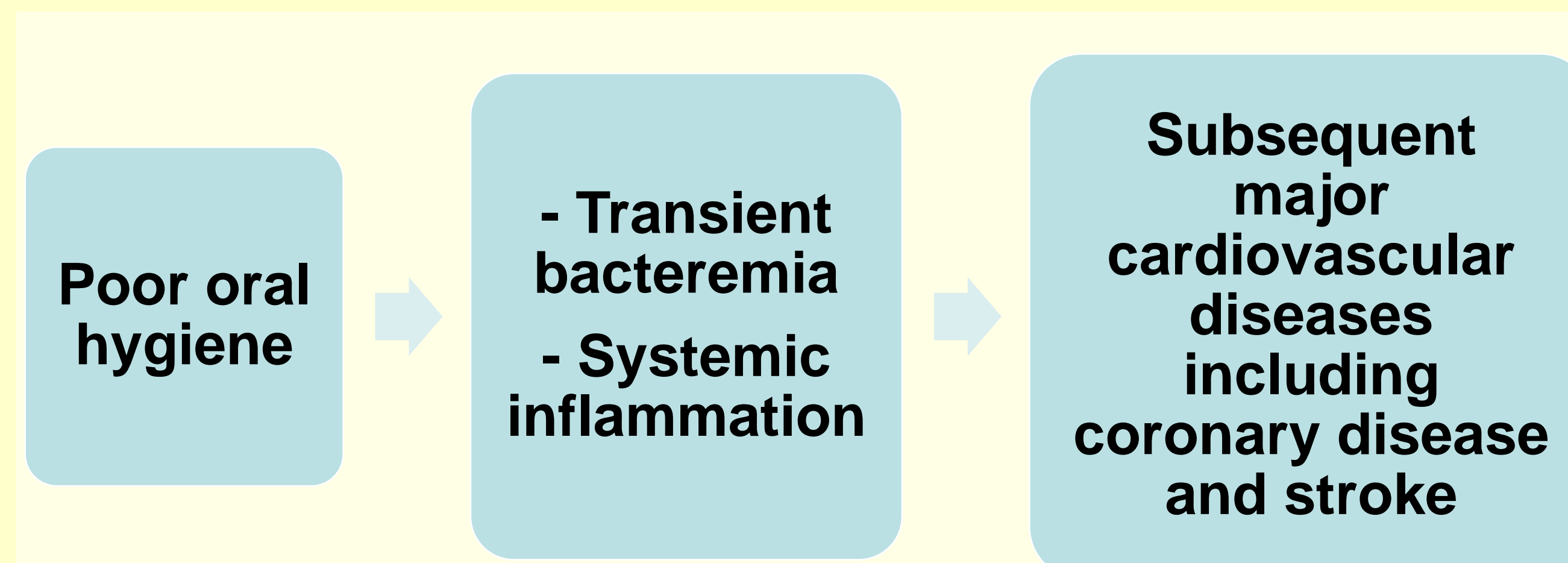


Periodontal Disease and Risk of Atrial Fibrillation and Atrial flutter: A Meta-Analysis

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BACKGROUND



- Periodontal disease is one of the most common systemic inflammatory diseases worldwide.
- The data regarding the association between **periodontal disease** and **atrial fibrillation or atrial flutter** is limited.
- We, therefore, conducted a meta-analysis to evaluate the risk of atrial fibrillation and atrial flutter in periodontal disease patients.

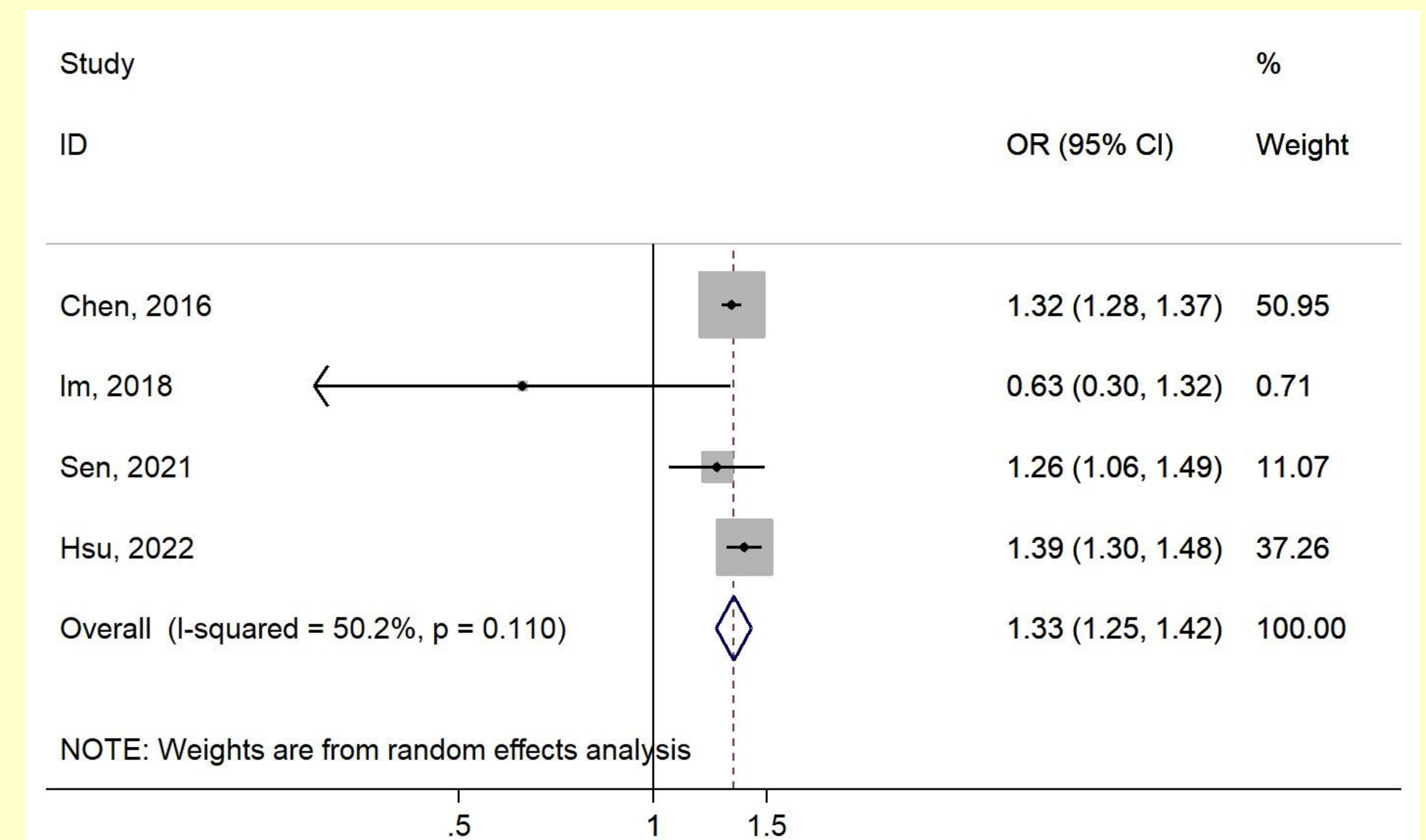


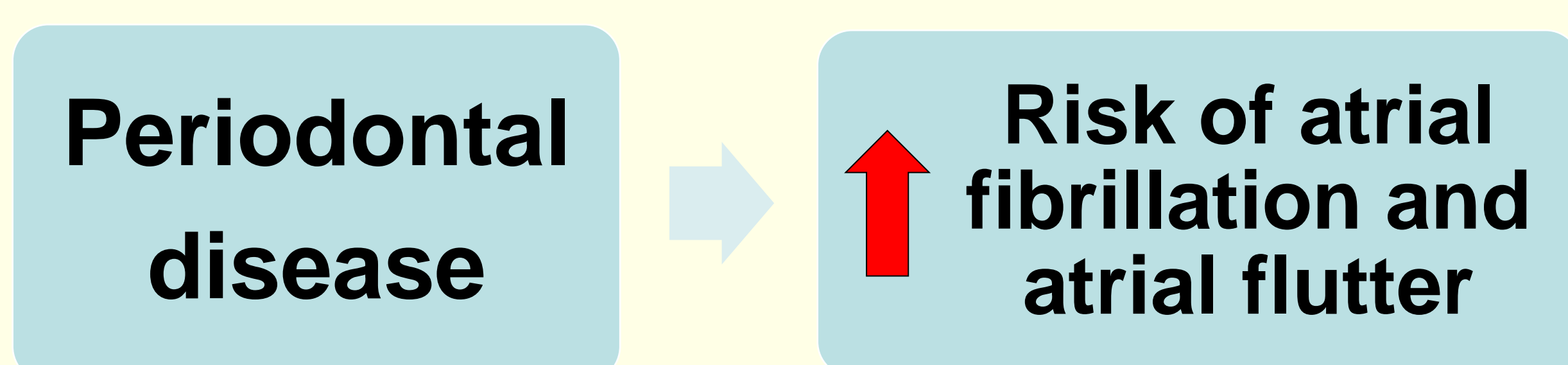
Figure 1. Forest plot demonstrating the association between Periodontal Disease and Risk of Atrial Fibrillation and Atrial flutter.

METHODS

- **Databases:** MEDLINE and EMBASE from the inception to December 13, 2022
- We included cohort studies that evaluate the risk of atrial fibrillation or atrial flutter in periodontal disease patients.
- Data from each study were combined using the random-effects model to calculate pooled odds ratio (OR) with 95% confidence interval (CI).

RESULTS

- 4 eligible cohort studies involving
 - 680,641 patients with periodontal disease
 - 378,154 patients without periodontal disease
 - Included in our meta-analysis



- Pooled OR = 1.331, 95% CI 1.250-1.418, I²=50.2%

CONCLUSIONS

- Our meta-analysis indicated that periodontal disease is associated with a higher risk of atrial fibrillation and atrial flutter.
- Further studies are required to confirm the result and investigate how this should be addressed in clinical practice.

