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Clinical outcomes in patients with atrial fibrillation receiving amiodarone on NOACs vs. warfarin

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Background

- Amiodarone is a potent inhibitor of the CYP450:3A4 and inhibitor of the P-glycoprotein, both of which metabolize new oral anticoagulants (NOACs).
- Patients who are on NOACs and are concomitantly treated with amiodarone may have a higher risk of major bleeding according to recent retrospective trials.
- Whether this increased risk outweighs the benefits of NOACs compared to warfarin is unknown.

Aim of the study

- To compare clinical outcomes between NOACs and warfarin in patients with atrial fibrillation (AF) being treated with amiodarone.

Methods

- A systematic review of MEDLINE, Cochrane, and Embase for randomized controlled trials that compared NOACs to warfarin for prophylaxis of ischemic stroke/thromboembolic events (TEs) in patients with AF and reported outcomes onTE, major bleeding, and intracranial bleeding(ICB).

Results

- The total number of patients on amiodarone was 6197.
- There was no statistical difference for TE prevention (RR, 0.73; 95% CI 0.50–1.07), major bleeding (RR, 1.02; 95% CI 0.68–1.53), and ICB (RR, 0.58; 95% CI 0.22–1.51) between patients on NOACs when compared to patients on warfarin in patients with AF being treated with amiodarone.

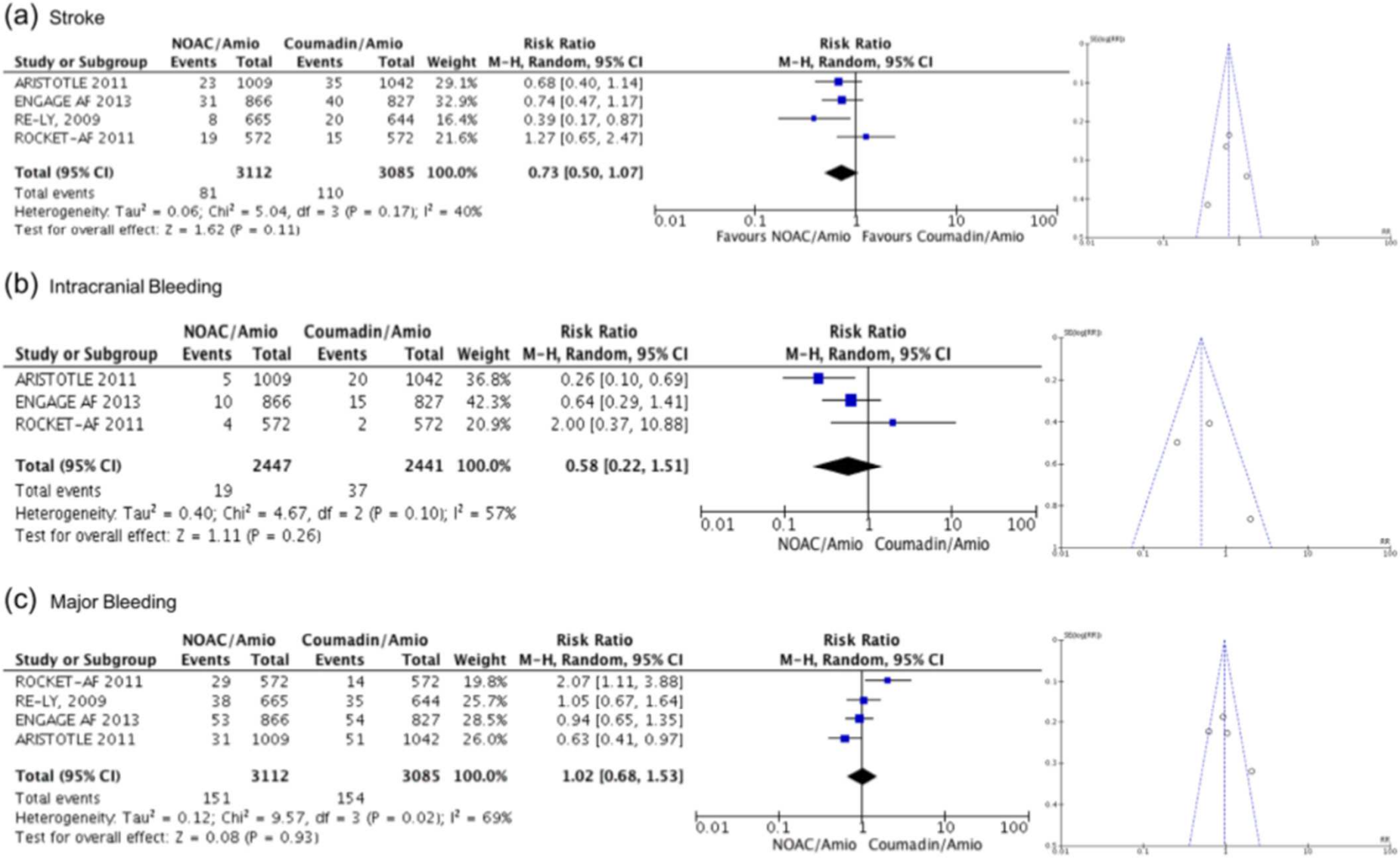

Fig. 4 Forrest plots and funnel plots for the comparative analyses of clinical outcomes in patients concomitantly using NOAC and amiodarone vs Coumadin and amiodarone. **a** Stroke. **b** Major bleeding, **c** Intracranial bleeding

Conclusions

- The concomitant use of amiodarone and NOACs in patients with NVAF appears to be safe and effective as compared with warfarin, as it does not negatively impact clinical outcomes such as TE, major bleeding, and ICB.
- However, physicians should consider alternative antiarrhythmic drugs in patients with NVAF and without structural heart disease (as suggested by guidelines), in order to avoid unnecessary drug interactions.