Oral Anticoagulation Alone Versus Oral Anticoagulation Plus Single Antiplatelet Therapy in Atrial Fibrillation and Chronic Coronary Syndrome: A Systematic Review and Meta-analysis of Randomized Trials

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Background

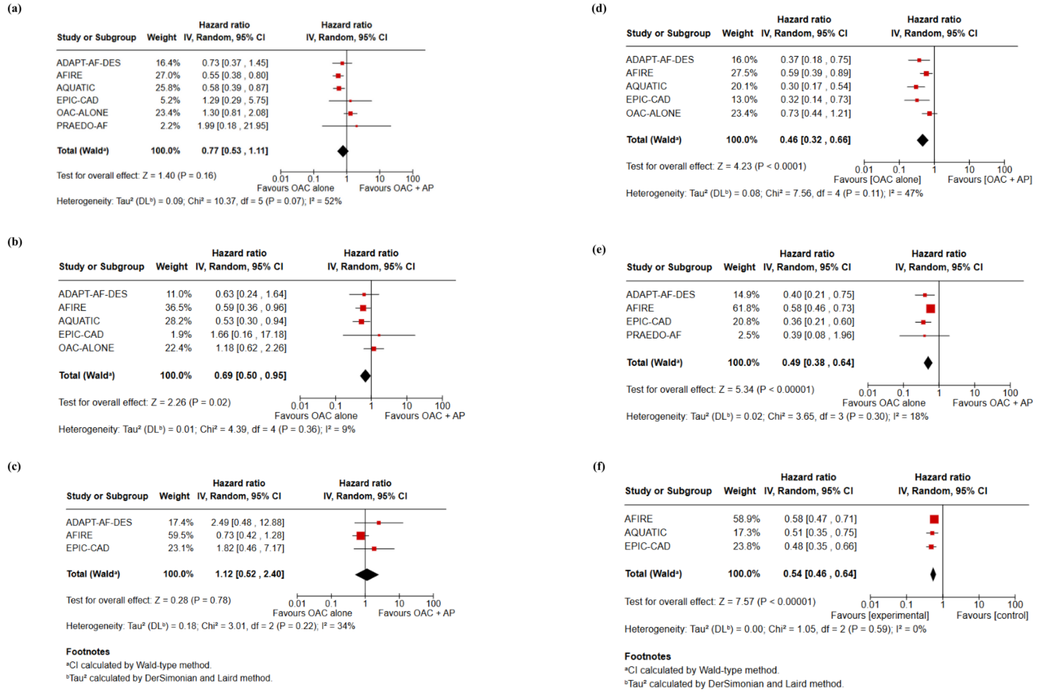
The optimal antithrombotic regimen in patients with atrial fibrillation (AF) and chronic coronary syndrome (CCS) remains uncertain. Prior randomized controlled trials and earlier meta-analyses suggested that oral anticoagulation (OAC) alone without antiplatelet therapy might provide adequate ischemic protection while reducing bleeding in patients with AF and CCS.

Methods

We systematically searched PubMed, Scopus, and Embase for randomized controlled trials comparing OAC alone versus OAC plus single antiplatelet therapy in patients with AF and CCS. Meta-analysis of 6 RCTs comprising 5,924 patients was performed. Random-effects models were used to calculate pooled hazard ratios (HRs) and 95% confidence intervals (CIs) for outcomes including all-cause mortality, cardiovascular death, myocardial infarction, ischemic stroke, major bleeding, clinically relevant non-major bleeding, and any bleeding.

Results

OAC alone significantly reduced cardiovascular death (HR 0.69, 95% CI 0.50-0.95; p=0.02), major bleeding (HR 0.46, 95% CI 0.32-0.66; p<0.001), clinically relevant non-major bleeding (HR 0.49, 95% CI 0.38-0.64; p<0.001), and any bleeding (HR 0.54, 95% CI 0.46-0.64; p<0.001). There were no other statistically significant differences between the groups for the remaining outcomes.



Forest plots showing results of primary and secondary outcomes : (a) all-cause mortality, (b) cardiovascular death, (c) ischemic stroke, (d) primary safety endpoint (major bleeding), (e) clinically relevant non-major bleeding, and (f) any bleeding.

Key findings

- **Similar ischemic protection overall**
- **Lower cardiovascular death (b) HR 0.69 (0.50-0.95)**
- **Lower major bleeding (d) HR 0.46 (0.32-0.66)**
- **Lower CRNMB (e) HR 0.49 (0.38-0.64)**
- **Lower any bleeding (f) HR 0.54 (0.46-0.64)**

Conclusion

In AF and CCS, OAC alone confers similar protection against ischemic events and significantly reduces bleeding and cardiovascular death compared with OAC plus single antiplatelet therapy.