

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

Authors: Saif-Eddin Dabour MD, Elmustafa Hamed, Abdullah Kouli, Parth Patel MD, Bret Cypel DO, Said Ashraf MD FSCAI, Waqas Ullah MD FSCAI

Background

The optimal antithrombotic regimen in patients with atrial fibrillation (AF) and chronic coronary syndrome (CCS) remains uncertain. Prior randomized controlled trials (RCTs) 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 RCTs comparing OAC alone vs. OAC plus 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.

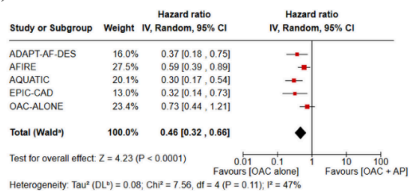
Results

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 0.68, 95% CI 0.51–0.89; $p<0.001$). There were no other statistically significant differences between the groups for the remaining outcomes. Leave-one-out analyses suggested all-cause mortality is sensitive to the exclusion of OAC-ALONE trial (HR 0.61, 95% CI 0.47–0.78; $p<0.001$) vs. (HR 0.77, 95% CI 0.53–1.11; $p=0.16$).

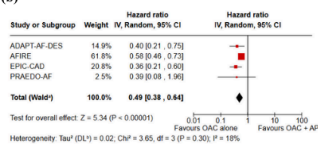
Conclusions

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

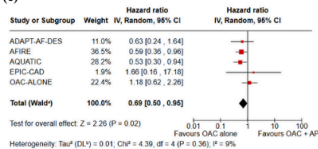
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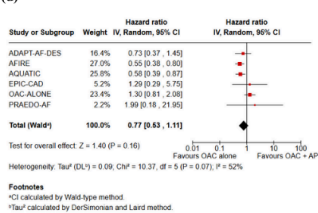
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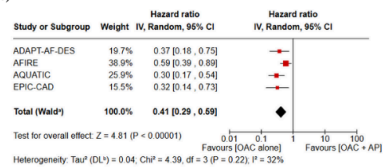
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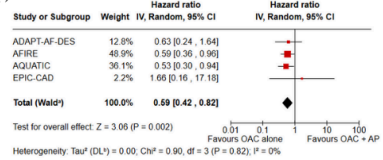
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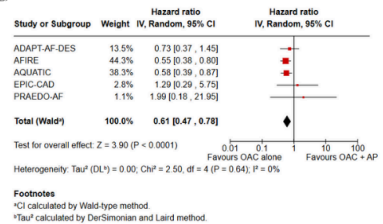
(e)



(f)



(g)



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

Forest plots showing results of sensitivity analysis (excluding OAC-ALONE): (e) primary safety endpoint (major bleeding), (f) cardiovascular death, and (g) all-cause mortality.