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Abstract: P1034

Impact of ablation status on the efficacy and safety of dronedarone in patients with atrial fibrillation/flutter: a post-hoc analysis of the ATHENA trial

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Topic(s):
Atrial Fibrillation - Treatment

Citation:
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Background: Despite increasing use of ablation for atrial fibrillation/flutter (AF/AFL), few systematic data exist on the use of dronedarone and other antiarrhythmic drugs after ablation.

Purpose: To assess efficacy and safety of dronedarone after ablation in patients with paroxysmal/persistent AF/AFL randomized to dronedarone or placebo in the ATHENA trial (NCT00174785).

Methods: In ATHENA, 196 patients (dronedarone 90, placebo 106) had an ablation for AF/AFL prior to study entry. AF/AFL recurrence was evaluated in patients in sinus rhythm at baseline (dronedarone 63, placebo 65) by ECG during study visits or symptom recurrence.

Results: Ablated vs non-ablated patients were more likely to be male, have an implantable cardioverter defibrillator or pacemaker implanted, or be receiving an oral anticoagulant. Fewer ablated patients had an AF/AFL recurrence with dronedarone (36 [57%]) than with placebo (46 [71%]). Median time to first AF/AFL recurrence was significantly longer with dronedarone versus placebo (561 versus 180 days; hazard ratio 0.65 [95% CI 0.42–1.00], p<0.05; Fig 1). Time to first cardiovascular hospitalization or death was similar with dronedarone versus placebo (hazard ratio 0.98 [0.62–1.53]). On-treatment rates of treatment-emergent adverse events with dronedarone versus placebo were 83.1 versus 75.5%, serious treatment-emergent adverse events were 27.0 versus 18.9%, permanent drug discontinuations were 10.1 versus 15.1%, and deaths were 0 versus 1.9%.

Conclusions: Dronedarone delayed AF/AFL recurrence in patients with a prior AF/AFL ablation. Safety outcomes were consistent with the overall ATHENA trial. Adequately sized prospective studies are needed to confirm these observations. Given the sparsity of data for antiarrhythmic drugs after ablation, this retrospective analysis has merit and is useful for hypothesis generation.
Figure 1: Time to first AF/AFL recurrence in patients with ablation prior to randomization