EAST AFNET 4: Effects of Early Rhythm Control Therapy in Patients with Atrial Fibrillation

Purpose: EAST AFNET prospectively tests the hypothesis that an early, structured rhythm control therapy based on antiarrhythmic drugs and catheter ablation can prevent atrial fibrillation (AF) related complications in patients with AF when compared to usual care. Patients were randomized to early therapy or usual care. In the early therapy group, patients will receive either catheter ablation (usually by pulmonary vein isolation), or adequate antiarrhythmic drug therapy at an early time point. The initial therapy will be selected by the local investigator. Upon AF recurrence, both modalities will be combined. Usual care was conducted following the 2010European Society of Cardiology (ESC)guidelines for AF treatment. Early rhythm control therapy will be guided by Electrocardiogram (ECG) monitoring.

Trial Design: N=2789, multi-centered, prospective, randomized, open blinded study.

Primary Endpoints: 1) Composite of cardiovascular death, stroke, worsening of heart failure, or acute coronary syndrome, and 2) Nights spent in hospital per year

	Patients with event in Early Rhythm Control (n = 1395)	Patients with event in Usual Care (n = 1394)	Uncorrected Hazard Ratio [95% CI]
Cardiovascular death	67/6915 (1.0)	94/6988 (1.3)	0.72 [0.52-0.98]
Stroke	40/6813 (0.6)	62/6856 (0.9)	0.65 [0.44-0.97]
Hospitalization with worsening of heart failure	139/6620 (2.1)	169/6558 (2.6)	0.81 [0.65-1.02]
Hospitalization with acute coronary syndrome	53/6762 (0.8)	65/6816 (1.0)	0.83 [0.58-1.19]

Conclusion: The EAST-AFNET trial showed that early intervention with structured follow-up significantly reduced cardiovascular adverse events. It provided ressuring evidence that early rhythm control with a structured follow-up is safe for patients with AF and no-to-mild/moderate structural heart disease. However, the role of early rhythm control in the observed difference in event rates is unclear

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