

The CABANA trial: A first glance at an important study

The first results of the randomized, multicentre, long-term, international CABANA clinical trial were presented at Heart Rhythm 2018, the Heart Rhythm Society's 39th Annual Scientific Sessions in Boston, 9–12 May 2018

The CABANA Trial (Catheter Ablation vs. Anti-arrhythmic Drug Therapy for Atrial Fibrillation Trial) was to establish outcomes with either medical therapy or catheter-based ablation with radiofrequency energy for the management of patients with new-onset or untreated atrial fibrillation (AF), specifically for decreasing the incidence of the composite primary endpoint of all-cause mortality, disabling stroke, serious bleeding, or cardiac arrest.

Major secondary endpoints were all-cause mortality, death (all-cause), or cardiovascular hospitalization.

The need for the trial arose from:

- (1) the rapidly increasing number of points > 60 years of age with AF accompanied by symptoms and morbidity
- (2) the failure of anti-arrhythmic drug therapy to maintain sinus rhythm and reduce mortality,
- (3) the rapidly increasing application of radiofrequency catheter ablation without appropriate evidence-based validation, and

- (4) the expanding impact of AF on health care costs.

The CABANA is an international global clinical research trial which has been conducted in 140 centres over 10 countries. In addition to the USA and Canada, international investigators are located throughout Europe, Asia, and the Pacific.



Also, the CABANA study would compare the cost of care for the two treatment approaches and determine the effect these therapies have on quality of life.

Study design

Patients were randomized in a 1:1 fashion to either catheter ablation ($n = 1108$) or drug therapy ($n = 1096$). Primary ablation was performed with standard techniques [pulmonary vein isolation (PVI)/wide area circumferential ablation (WACA), ancillary ablations as needed]. Drug therapy could be either for rate or rhythm control. All patients received anticoagulation.

- Total number of enrollees: 2204
- Duration of follow-up: 5 years
- Mean patient age: 67.5 years
- Percentage female: 37%

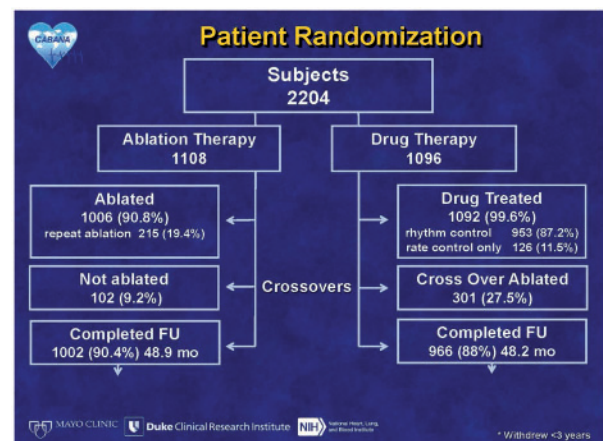
Inclusion criteria

Paroxysmal, persistent, or longstanding persistent AF patients who warrant therapy

- ≥ 65 years of age
- < 65 years of age with ≥ 1 cerebrovascular accident (CVA)/cardiovascular (CV) risk factor
- Eligible for ablation
- On ≥ 2 rhythm or rate control drugs

Other salient features/characteristics

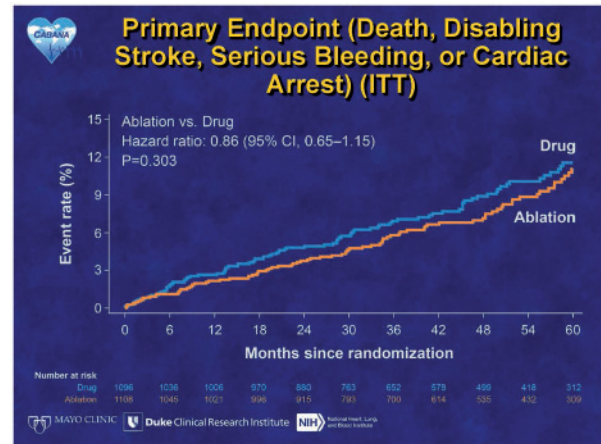
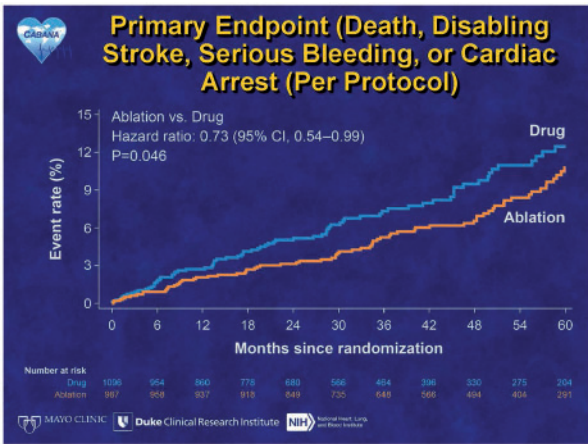
- Cardiomyopathy: 9%
- Chronic heart failure: 15%
- Prior CVA/transient ischaemic attack (TIA): 10%
- Type of AF: paroxysmal: 43%, persistent 47%



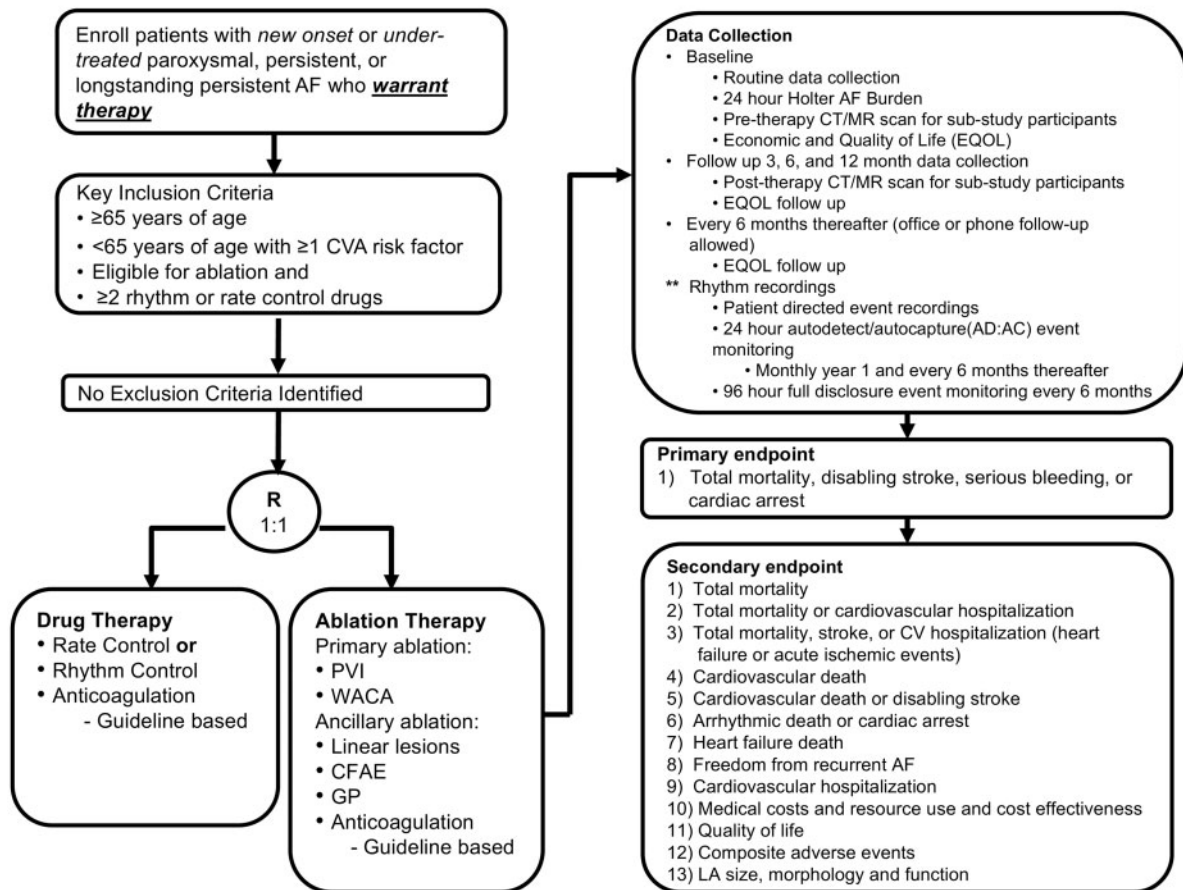
- Prior hospitalization for AF: 39%
- Crossover: ablation to drug: 9.2%, drug to ablation: 27.5%

Principal findings

The primary outcome, death, disabling stroke, serious bleeding, or cardiac arrest at 5 years for ablation vs. drug therapy, was almost identical for per protocol and intention-to-treat (ITT), see charts with hazard ratio (HR) 0.86, 95% confidence interval (CI) 0.65–1.15; $P=0.3$ for ITT.



CABANA Trial Design



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Conflict of interest: none declared.