

Early Catheter Ablation Delays Atrial Fibrillation Disease Progression and Reduces Healthcare Costs

The articles in this email may consist of clinical trials and observational studies as well as economic analyses. Access to these articles and to additional clinical articles with similar results are provided through the embedded links. Membership to individual sites may be required in order to access the material.

ATTEST Randomized Controlled Trial: Atrial Fibrillation Ablation Delays Disease Progression

Kuck K-H, Lebedev DS, Mikhaylov EN, et al. [Catheter ablation or medical therapy to delay progression of atrial fibrillation: The randomized controlled Atrial Fibrillation Progression Trial \(ATTEST\)](#). *Europace*. Published online December 17, 2020. 2021;23930:262-369.



OBJECTIVE

- To evaluate if radiofrequency (RF) catheter ablation is more effective than antiarrhythmic drug (AAD) treatment alone in delaying disease progression from paroxysmal to persistent atrial fibrillation (AF)



METHOD

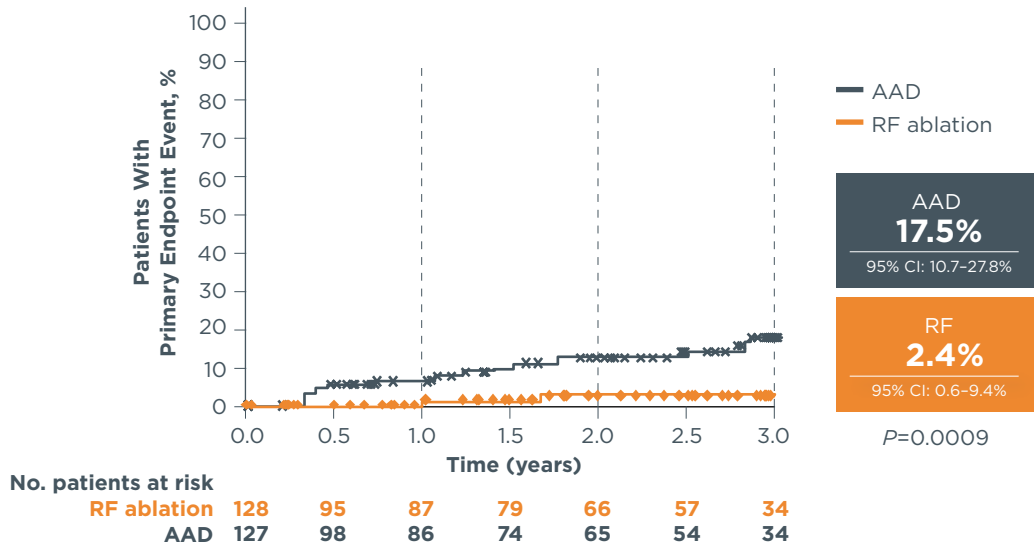
- Prospective, multicenter, randomized, controlled, open-label study
- 255 patients with paroxysmal AF randomized 1:1 to RF ablation or AAD treatment
- Medications managed in both groups per current treatment guidelines
- Primary endpoint: Rate of persistent AF/atrial tachycardia (AT) assessed at 3-year follow-up



RESULTS

The superiority of RF treatment over AAD alone in delaying persistent AF/AT progression was observed at 1-year follow-up and strengthened by the 3-year follow-up.

Kaplan-Meier Estimate of Persistent AF/AT Progression (Intent-to-Treat Population)



Treatment modality and age were associated with AF progression in the per-protocol population, suggesting that early RF ablation can delay disease progression.

Cox Model With Multiple Baseline Covariates and Treatment as the Time-Dependent Covariate



Patients treated with RF ablation

RF ABLATION PATIENTS WERE APPROXIMATELY **10X LESS LIKELY** TO **PROGRESS** TO PERSISTENT AF/AT THAN AAD PATIENTS
Hazard ratio: 0.107 (95% CI: 0.024-0.47; $P=0.0031$)



Patients ≥ 65 years old

PATIENTS >65 YEARS OLD WERE ALMOST **4X MORE LIKELY** TO **PROGRESS** TO PERSISTENT AF/AT THAN PATIENTS 60-64 YEARS OLD, REGARDLESS OF TREATMENT ALLOCATION
Hazard ratio: 3.87 (95% CI: 0.88-17.00; $P=0.0727$)

KEY TAKEAWAYS



- ATTEST demonstrated that **RF catheter ablation is superior to guideline-directed AAD therapy alone in delaying the progression to persistent AF** in patients with paroxysmal AF.
- Patients treated with RF ablation were **10X** less likely to progress, and patients ≥ 65 years were **4X** more likely to progress to persistent AF/AT, respectively.
- These results suggest that **early RF ablation** may be an **effective treatment strategy** for delaying AF progression.

ARTICLES WITH SIMILAR RESULTS

Kirchhof P, Camm AJ, Goette A, et al. [Early rhythm-control therapy in patients with atrial fibrillation](#). *N Engl J Med*. 2020; 383(14):1305-1316.



FORWARD TO A FRIEND

Reduction in Healthcare Utilization and Cost Associated with Paroxysmal and Persistent Atrial Fibrillation Ablation

Friedman DJ, Field ME, Rahman M, et al. [Catheter ablation and healthcare utilization and cost among patients with paroxysmal versus persistent atrial fibrillation](#). *Heart Rhythm O2*. Published online December 14, 2020 doi: 10.1016/j.hroo.2020.12.017.



OBJECTIVE

- To examine AF-related healthcare utilization and costs in patients with paroxysmal and persistent AF from preablation to postablation





METHOD

- Retrospective, observational cohort study of 2,794 paroxysmal AF and 1,909 persistent AF patients undergoing catheter ablation (2016-2018) identified in the OPTUM® deidentified Clinformatics® Data Mart Database
- Cost (2018 US\$) and outcomes compared for the year before/after ablation using McNemar test and Wilcoxon signed rank test



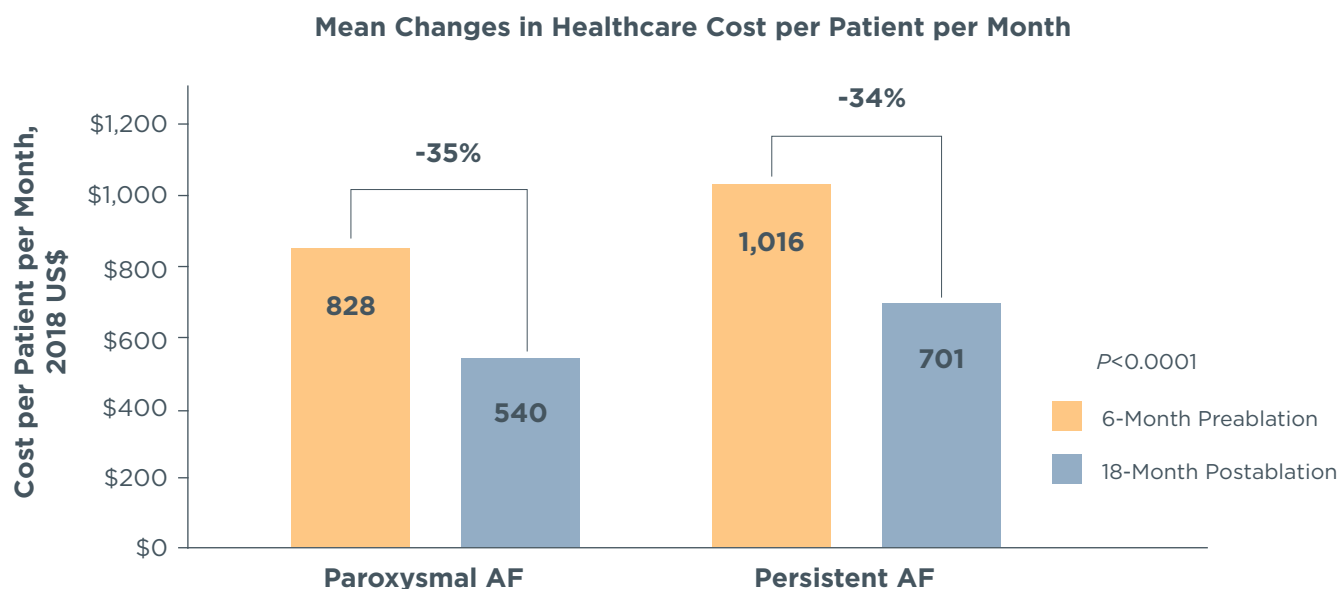
RESULTS

Mean Cost Per Patient Were Reduced 12-Month Postablation Compared to 12-Month Preablation

	AF-Specific Inpatient Admissions	Emergency Department Visits	AAD use	Cardioversions
	-28%	-76%	-25%	-59%
	-33%	-70%	-7%	-55%

P value for AAD use for persistent AF patients=0.014; all others <0.001

Total AF Management Costs Reduced at 18 Month Follow-Up in Spite of Repeat Ablation Costs



KEY TAKEAWAYS



- Significant reductions in healthcare utilization and costs were observed among paroxysmal AF and persistent AF patients undergoing catheter ablation.
- The magnitude of reductions increased with greater duration of follow-up.
- Based on these data, a strategy of earlier catheter ablation may have the potential to reduce long-term healthcare utilization and costs.



[FORWARD TO A FRIEND](#)

THERMOCOOL[®] Navigation Catheters are indicated for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation, when used with CARTO[®] 3 Systems (excluding NAVISTAR[™] RMT THERMOCOOL[™] Catheter).

The THERMOCOOL SMARTOUCH[®] SF Catheter is indicated for drug refractory recurrent symptomatic persistent atrial fibrillation (AF) (continuous AF >7 days but <1 year), refractory or intolerant to at least 1 Class I or III AAD, when used with the CARTO[®] 3 System.

Important information: Prior to use, refer to the instructions for use supplied with this device for indications, contraindications, side effects, warnings and precautions.

Caution: US law restricts this device to sale by or on the order of a physician.

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