BEAT PERS-AF trial

FARAPULSE™ PFA demonstrated effectiveness, safety, and procedural efficiency in patients with persistent AF.

OBJECTIVE

BEAT PERS-AF[1] was a randomized, non-comparative *European trial that measured the 12-month safety and effectiveness of FARAPULSE PFA using the FARAWAVE™ Pulsed Field Ablation Catheter in patients with persistent atrial fibrillation (AF).

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DESIGN

- BEAT PERS-AF included 83 drug-resistant symptomatic persistent AF patients randomized to FARAPULSE PFA (n = 49) or SmartTouch RF (n = 32) using the CLOSE protocol.
- All patients were treated with pulmonary vein isolation plus posterior line ablation and were followed up with either intermittent electrocardiogram (ECG), Holter, telemetry, or weekly Kardia monitoring.

SAFETY

Safety in the trial was defined by procedure-related serious adverse events (SAE) out to 12 months.

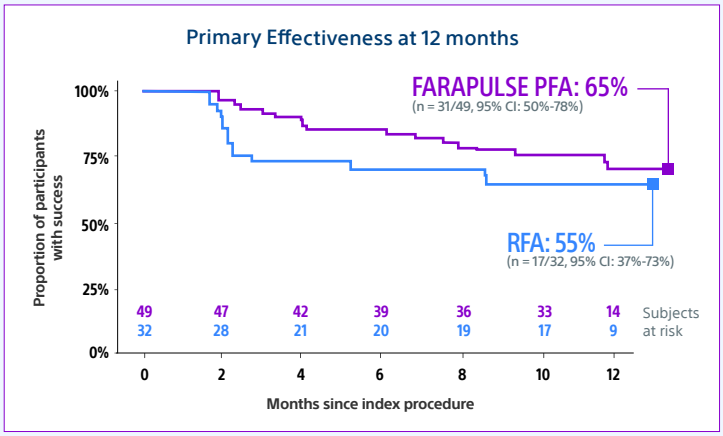
- FARAPULSE PFA:
  - There were no reports of stroke, PV stenosis, esophageal fistula, persistent phrenic palsy, or major vascular access complications.
  - n = 1 coronary spasm was reported due to a CTI ablation that violated protocol. No prophylactic nitroglycerin was used.
- RF:
  - Safety events for RF included PV stenosis > 50% (n = 4/32, 12%), esophageal ulcer (n = 1/49, 3%) and vascular access complications (n = 2/32, 6%).

No PV stenosis or thermal complications.

EFFECTIVENESS

The effectiveness endpoint was defined as freedom from atrial arrhythmia recurrence lasting ≥30 seconds, as detected by rhythm monitoring, as well as absence of cardioversion or resumption of antiarrhythmic drug therapy, following a two-month blanking period (A'Hern design; $H_0 < 40\%$, $H_1 \geq 60\%$).

FARAPULSE PFA met trial endpoint with 65% effectiveness at 12 months.



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PROCEDURAL CHARACTERISTICS

FARAPULSE PFA demonstrated efficiency in procedure and LA dwell time, enabling predictable procedures.

CONCLUSIONS

- **Reaffirmed effectiveness of FARAPULSE PFA**
- **Upheld favorable safety with no thermal complications**
- **Reinforced procedural advantages for FARAPULSE PFA**

FARAPULSE PFA demonstrated consistent effectiveness in the persistent patient population, with a positive safety profile and high procedural efficiency.

1. Jaïs, P. et al., Pulsed field versus radiofrequency ablation for the treatment of persistent atrial fibrillation: The BEAT Pers-AF trial. EHRA, April 14, 2026.
2. Jaïs, P. et al., Pulsed field vs radiofrequency ablation for paroxysmal atrial fibrillation: The BEAT PAROX-AF trial, *European Heart Journal,* 2026.
3. Reddy, V.Y., et al. (2025). Pulsed field ablation for persistent atrial fibrillation: 1-year results of the ADVANTAGE AF trial. *Journal of the American College of Cardiology,* 85(17), 1664-1678. https://doi.org/10.1016/j.jaac.2025.03.515
4. Verma, A., et al. (2015). Approaches to catheter ablation for persistent atrial fibrillation. *New England Journal of Medicine,* 372(19), 1812–1822. https://doi.org/10.1056/NEJMoa1408288
5. Scherr, D., et al. (2015). Five year outcome of catheter ablation of persistent atrial fibrillation. *Circulation: Arrhythmia and Electrophysiology,* 8(4), 773–780. https://doi.org/10.1161/CIRCEP.114.002302

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