Medtronic

Success Simplified

Achieve more with tailored AF ablation

Based on a matched-adjusted indirect comparison of the SPHERE Per-AF and ADVANTAGE AF Phase I Trials.[1]

Indirect comparisons are not a substitute for head-to-head trials. Indirect comparisons have potential bias from unmeasured confounding factors, reduced statistical power, and imperfect matching of treatment effect modifiers.

Higher probability of success†

77.4%

12-month freedom from atrial arrhythmias in matched cohort of patients treated with the Sphere-9™ catheter (N = 205, p = 0.003).

63.5%

12-month freedom from atrial arrhythmias for patients treated with the FARAPULSE™* PFA system (N = 260).

Even when adjusted to account for differences in adjunctive linear ablation, results did not significantly change.‡

Sphere-9 catheter

† OR 0.51 (95% CI:0.32–0.80), p = 0.003

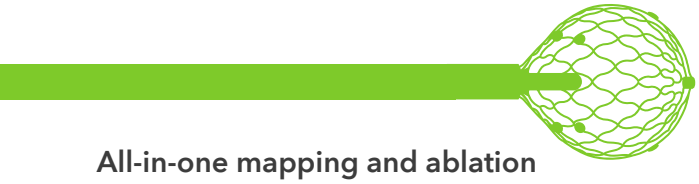
‡ MAIC-adjusted results for the sensitivity analysis performed to account for differences in adjunctive lesion sets: OR 0.44 (95% CI: 0.23–0.86), p = 0.017

Unparalleled versatility

Map, ablate, and validate: from PVI to CTI with a zero exchange workflow.

One Sphere-9 catheter

used in more than 97% of SPHERE Per-AF procedures (N = 206/212).[2]



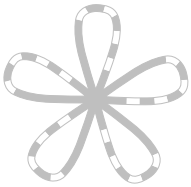
All-in-one mapping and ablation

Dual-energy ablation and Close-Unipolar™ mapping with full integration to the Affera™ mapping system

Up to three catheters

used in ADVANTAGE AF I procedures.

FARAWAVE™* PFA catheter used for PVI and LA posterior wall isolation in all cases.



Additional RF catheter used for CTI line ablation in 19% of patients (N = 50/260).

Supplementary high-density mapping catheter usage was not reported, but 3-D mapping was used in 75% of cases (N = 195/260).

Less fluoro

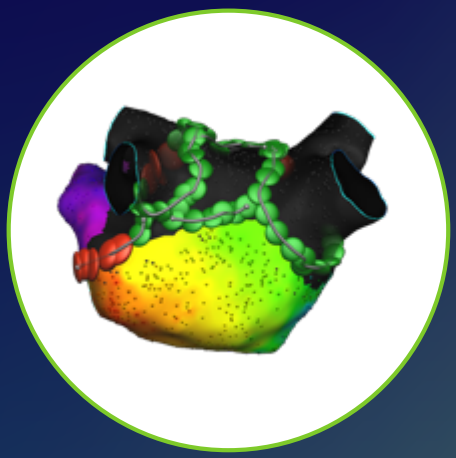
5.1 ± 7.1 min
Sphere-9 catheter in SPHERE Per-AF

19.5 ± 13.1 min
FARAPULSE PFA system in ADVANTAGE AF I

74%
less fluoro time on average after matching ($p < 0.01$)

More tailored ablation, uncompromised efficiency

Despite differences in adjunctive lesion sets performed, **skin-to-skin procedure times were similar between groups** after matching for baseline characteristics (p = 0.41, Sphere-9 catheter: 100.3 ± 34.3 min, FARAWAVE catheter: 103 ± 34.8 min)



Strong safety profile

No significant difference in primary safety event rates between patients treated with the Sphere-9 catheter and those treated with the FARAWAVE catheter, 1.8% versus 2.3%, respectively, after matching for baseline characteristics (p = 0.72).

1. Matsumoto K, van Bragt KA, Kueffer FJ, Mburu W, Tarakji KG. Indirect treatment comparison of two pulsed field ablation systems for the treatment of persistent atrial fibrillation. *J Interv Cardio Electrophysiol*. Published online September 10, 2025.
2. Anter E, Mansour M, Nair D, et al. Dual-energy lattice-tip ablation system for persistent atrial fibrillation: a randomized trial. *Nat Med*. August 2024;30(8):2303–2310.

Medtronic

Europe
Medtronic International Trading Sàrl.
Route du Molliau 31
Case postale
CH-1131 Tolochenaz
Tel: +41 (0)21 802 70 00
Fax: +41 (0)21 802 79 00

medtronic.eu