Why Cryoballoon Ablation

- As demonstrated in the FIRE and ICE Trial, cryoballoon was proven to be comparable to radiofrequency (RF) ablation.\(^1\) In addition, the use of the cryoballoon resulted in fewer rehospitalizations and fewer repeat ablations than RF.\(^2\)
- Catheter ablation may reduce stroke risk.\(^3\)
- Ablation is generally considered to be a safe and effective treatment for PAF after antiarrhythmic drugs (AADs).\(^4\)
- Cryoballoon outcomes may be more reproducible than RF ablation.\(^5\)

Consider referring to an electrophysiologist (EP) who utilizes cryoballoon and RF as treatment options.

If left untreated:

- AF may increase the risk of heart failure, stroke, and death.\(^6\)-\(^9\)
- AF increases the risk for stroke five-fold.\(^8\)
- Mortality rates are greater in the 30 days following AF related stroke vs. non-AF strokes.\(^9\)
- AF increases the rise of thromboembolic events or ischemic stroke.\(^10\)
- Patients with AF have significantly poorer quality of life when compared to healthy controls and the population.\(^11\)

Data from the Swedish Health Registries has shown that patients who receive catheter ablation were associated with lower risk of stroke and a lower mortality risk compared to patients managed medically.\(^3\)


Patients have better outcomes the earlier they are treated.  

The Intermountain Health Study evaluated the impact of earlier treatment of AF by catheter ablation and found that delays in treatment impacted long-term clinical success, as well as other procedural outcomes like heart failure and death.

Among centers with varying annual ablation volume, cryoballoon ablation resulted in more consistent outcomes and procedure times compared to RF.\(^5\)

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**BETTER OUTCOMES WITH CRYOBALLOON**

**FIRE AND ICE TRIAL**

**PREDEFINED SECONDARY ANALYSES\(^2\)**

The FIRE AND ICE Ablation Clinical Trials is the largest prospective, 1:1 randomized, noninferiority study (762 patients from 16 sites in 8 countries) that compared the efficacy and safety of PVI using cryoballoon vs. radiofrequency (RFC) ablation with the CARTO\(^\text{TM}\) 3D mapping system in patients with paroxysmal atrial fibrillation (PAF). Primary Efficacy Endpoint: Time to first documented recurrence of AF > 30s/AT/AFL; prescription of AAD, or repeat ablation. Primary Safety Endpoint: Time to first all-cause death, all-cause stroke/TIA, or treatment-related serious AEs. The Cryoballoon met the primary safety and efficacy endpoints.

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**34% Fewer Cardiovascular Hospitalizations (including AF hospitalizations)**

| Cryo: 139 events in 89 subjects (89/174: 23.8%) | RFC: 203 events in 135 subjects (135/376: 35.9%) |

**33% Fewer Repeat Ablations**

| Cryo: 49 events in 44 subjects (44/174: 11.8%) | RFC: 70 events in 66 subjects (66/376: 17.6%) |

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\(^{13}\) Patients have better outcomes the earlier they are treated.

\(^{1}\) Indications

The Arctic Front Advance cryoablation catheter system is indicated for the treatment of drug refractory recurrent symptomatic paroxysmal atrial fibrillation.

\(^{2}\) Contraindications

Use of Arctic Front Advance cryoballoon is contraindicated if (1) In the ventricle because of the danger of catheter entrapment in the coronary sinus; (2) In patients with one or more pulmonary vein stenosis; (3) In patients with cryoglobulinemia; (4) In patients with active systemic infections; and (5) In conditions where the manipulation of the catheter within the heart would be unsafe (e.g., intracardiac mural thrombus).

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\(^{13}\) Caution:

Use of Arctic Front Advance catheter should be considered early in the paroxysmal atrial fibrillation (PAF) disease process.