

# STOP ARRHYTHMIAS COLD

OPTIMAL OUTCOMES. ELEGANT SIMPLICITY.

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INTRODUCING THE SURGIFROST® SYSTEM FOR THE COMPLETE MAZE



## CRYOTHERAPY AN EFFECTIVE CHOICE FOR THE COMPLETE MAZE

- Despite up to 95% success rate, the Cox Maze III is lengthy and technically challenging<sup>1</sup>
- Incomplete Mazes, though simpler and less risky, are also less effective (between 60% - 80%)<sup>2</sup>
- CryoMaze procedure allows you to perform the full bi-atrial Maze lesion set safely and with efficacy rates above 90%, including the important lesion between the inferior pulmonary veins (PV) and the mitral valve annulus<sup>3,4</sup>
- Short ablation times allow you to perform procedures such as the Maze in a timely manner<sup>5</sup>
- Transmural linear lesions can be produced in an open heart, or on a closed beating heart, giving you more flexibility to meet your patients' needs<sup>6,7</sup>
  - Critical mitral valve line increases efficacy of Maze procedure by approximately 10%
- Complete Cryo Maze success rates – up to 97%<sup>8</sup>

**“OUR LABORATORY EXPERIENCE WITH THE LEFT ATRIAL ISOLATION PROCEDURE AND WITH THE EXPERIMENTAL MAZE PROCEDURE CONFIRMED THAT THE ONLY SURE WAY TO INTERRUPT CONDUCTION ALONG THE CORONARY SINUS IS TO CRYOABLATE IT.”<sup>9</sup>**

## SURGIFROST®

### COOL CONFIDENCE TO COMPLETE A CRYOMAZE



### REDESIGNED TO BETTER MEET YOUR NEEDS

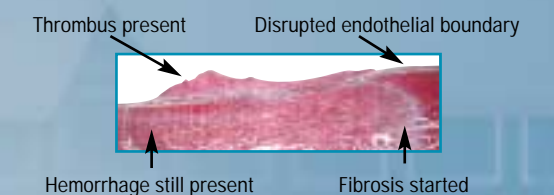
- 10 cm freezing segment can be configured to desired lengths and shapes for tailoring ablation lines; malleable probe shaft with adjustable insulation sleeve
- CryoAdhesion allows absolute certainty in placement of lesion lines
- Adaptable to various cardiac access incisions, including: full median sternotomy open chest, small sternal incisions, thoracotomy and thoracoscopic access
- Rapid, efficient transmurality
  - 1 minute freeze time for on-pump cases
  - 3 minutes for off-pump epicardial cases
- Longer, more flexible hose stays clear of your line of vision
- More ergonomic handle improves instrument performance
- Improved connector simplifies set-up procedure

**THE SURGIFROST SURGICAL CRYOABLATION SYSTEM IS INDICATED FOR USE IN THE CRYOSURGICAL TREATMENT OF CARDIAC ARRHYTHMIAS.**

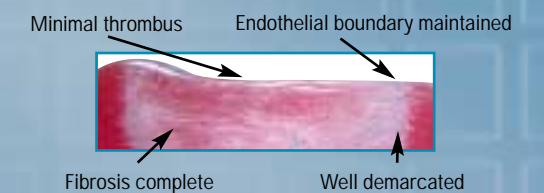
## CRYOABLATION THE COLD STANDARD FOR SAFETY

- CryoTherapy has been a critical part of the original Maze procedure since its development<sup>9</sup>
- CryoAblation preserves tissue and collagen matrix integrity<sup>10,11</sup>
  - Virtually no risk of PV stenosis<sup>12</sup>
  - Intact endothelium minimizes risks of endocardial thrombus associated with heat-based energy sources<sup>10</sup>
  - “Cryothermal tissue injury is distinguished from hyperthermic injury by the preservation of basic underlying tissue architecture and minimal thrombus formation.”<sup>11</sup>
- No burning or charring
- SurgiFrost 10 uses new Argon technology to rapidly achieve  $-160^{\circ}\text{C}$  in 30 to 60 seconds

RF lesion at 1 week (Canine model)<sup>10</sup>



Cryo lesion at 1 week (Canine model)<sup>10</sup>



**“CRYOABLATION INDUCES NECROSIS OF MYOCARDIAL FIBERS BUT SPARES THE COLLAGENOUS FRAMEWORK. THE CHRONIC SCAR IS MADE OF DENSE FIBROTIC TISSUE THAT HAS NO TENDENCY TO RUPTURE OR DILATE.”<sup>13</sup>**

# COMPLETE YOUR CARDIAC ARRHYTHMIA SURGERY OPTIONS WITH THE NEW COLD STANDARD

- Completes all Maze lesion lines efficiently
- Versatility for all approaches; open and closed heart, beating and stopped heart
- CryoAdhesion allows absolute certainty in lesion placement
- Transmural in 1 minute in open heart and 3 minutes in beating heart
- Adjustable temperature and dosing for maximum flexibility and precision down to  $-160^{\circ}\text{C}$
- CryoAdhesion allows lesion placement certainty and ability to manipulate heart tissue
- Adjustable insulation sheath allows ablation zone between 25 and 100 mm
- 10 cm malleable cryoablation segment shapes to heart structures

## PRODUCT LISTING

REF NO.	DESCRIPTION
60SF2	SurgiFrost® CryoSurgical Probe, 100 mm
65CS1	CryoSurgical Console Control Unit (North America)
65CSE	CryoSurgical Console Control Unit (Europe)
65TC1	Tank / Console Carrier
67RAXNA	Regulator Assembly (North America)
67RAXE	Regulator Assembly (Europe)
671PC(X)	Power Cord (country-specific)
67H08	Gas Hose, 2.4 m (8 ft)
67H25	Gas Hose, 7.6 m (25 ft)

SurgiFrost 10 cryosurgical system is intended for use:



In the USA for minimally invasive cardiac surgical procedures, including the treatment of cardiac arrhythmias. 510(k) cleared



In Europe for surgical procedures, including surgical treatment of cardiac arrhythmias. CE Mark



The CryoConsole features intuitive touch-screen operation and a multi-feature, fail-safe safety system



## References

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