

CIRSE 2024 Lisbon, Portugal September 14-18

Tumour ablation: non-thermal (IRE, electrochemotherapy)

Coordinators:

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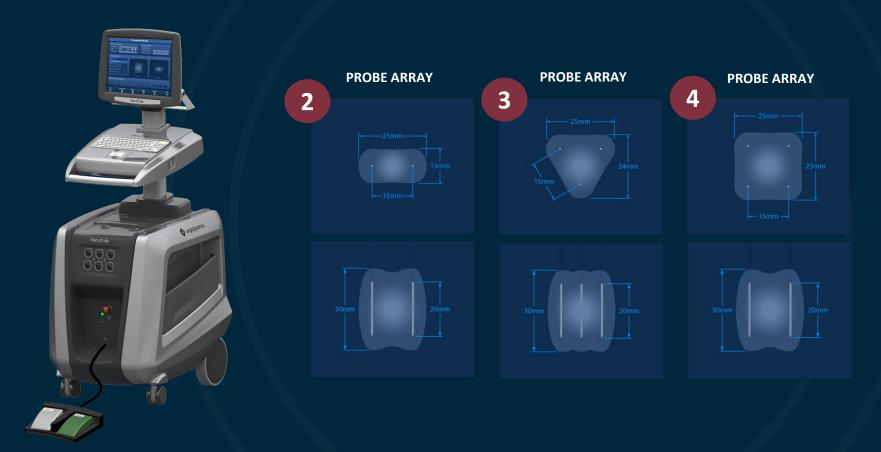
Participating corporate partners:

Angiodynamics
Curaway
IGEA
Surgnova Healthcare

There are a variety of different similar products for this procedure beyond the ones demonstrated in this session.

A UNIQUE ALTERNATIVE TO THERMAL ABLATION

An ablation procedure that uses low energy electrical pulses to create defects (pores) in cell membranes, resulting in loss of homeostasis and subsequent cell death.



INDICATIONS FOR USE: EU: The NanoKnife System is a medical device for cell membrane electroporation. Electroporation is a phenomenon that occurs in cell membranes as cells are exposed to an electrical field of sufficiently high intensity. The electric field acts as a physical stimulus, bringing about alterations in cell membranes that result in increased permeability. FDA: The NanoKnife 3.0 is not cleared for sale in the US. CONTRAINDICATIONS: Ablation procedures using the NanoKnife System are contraindicated in the following cases: Ablation of lesions in the thoracic area in the presence of implanted cardiac pacemakers or defibrillators; Ablation of lesions in the vicinity of implanted electronic devices or implanted devices with metal parts; Ablation of lesions of the eyes, including the eyelids; Patient history of Epilepsy or Cardiac Arrhythmia; Recent history of Myocardial Infarction. POTENTIAL ADVERSE EFFECTS: Adverse effects that may be associated with the use of the NanoKnife system include, but are not limited to the following: Arrhythmia; Pneumothorax; Muscle contraction; Hemorrhage; Unintended mechanical perforation; Infection; Bradycardia; Vagal Stimulation, asystole; and damage to critical anatomical structure (nerve, vessel, and/or duct). Indications, contraindications, warnings, precautions and instructions for use can be found in the Instructions for Use supplied with each device. Observe all instructions prior to use. Failure to do so may result in patient complications. *AngioDynamics, the AngioDynamics, logo, NanoKnife and the NanoKnife logo are trademarks and/or registered trademarks of AngioDynamics, Inc., an affiliate or a subsidiary. All others trademarks are the property of their respective owners. © 2021 AngioDynamics, Inc.





Echogenic electrode surface

Slim Profile

19 gauge needle with trocar tip

Access

Insertion depth: 15 cm & 25 cm

Markings

Depth markers indicate depth of needle tip

Adjustable

Active electrode tip: 0.5 cm – 4.0 cm

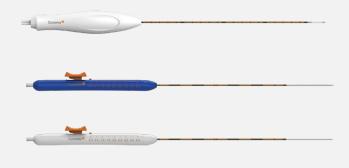
Cable Reach

10 ft. Connection cable



angiodynamics







IRE & RF DUAL ENERGY PLATFROM

Switching to RF mode to do <u>needle track ablation</u> with same probes after IRE procedure, effectively eliminates the potential tumor implantation metastasis and reduces the risk of bleeding.

LOCAL ANESTHESIA

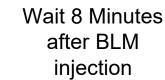
Curaway's latest IRE system requires only local anesthesia for a procedure in a specific mode.

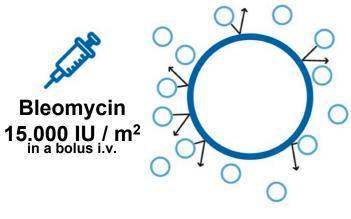
BIPOLAR PROBES AVAILABLE

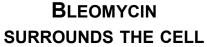
Curaway's bipolar probes significantly reduce the difficulty of probes placement, provides more precise ablation zone, and better ablation efficiency.

ELECTROCHEMOTHERAPY







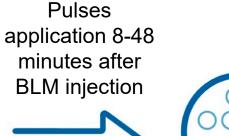






PULSES

INCREASED MEMBRANE PERMEABILITY ALLOWS ACCESS TO THE CYTOSOL





CELL MEMBRANE RESEALS AND BLEOMYCIN EXERTS ITS CYTOTOXICITY



Dophi™ N3000 Electroporation System

The New Generation of IRE Ablation System

- Move Freely
 Compact design forms portable Generator
- Multiple Monitoring & Control
 Full maturity of operating system implements controllable ablation
- Real-time Temperature Detection
 Build-in thermocouple in probe tip realizes the real-time temperature monitoring
- Stable & Safe
 Superior hardware support ensures operation stability in both operation system & energy output
- Simple Access to case report
 Intelligent cases management system supports to generate case report with one touch

