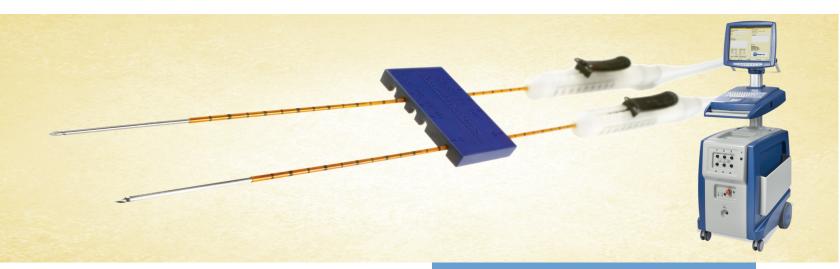


# **NanoKnife**<sup>®</sup> Irreversible Electroporation (IRE)



This minimally invasive procedure uses the NanoKnife<sup>®</sup> device, a nonthermal probe-based technology to pass electricity through the tumor, triggering tumor cell death.

# The NanoKnife® IRE ablative procedure effectively treats

- unresectable or difficult to reach tumors
- tumors near critical blood vessels
- tumor margins during and post resection
- patients who are not surgical candidates
- patients who have failed previous therapies

 Partners In Practice

 medical information for physicians by physicians

### How it works

Irreversible electroporation (IRE) is performed in a surgical suite by surgeons or interventional radiologists. The procedure involves:

- percutaneous, laparoscopic or open incisions, depending on tumor location and size
- insertion of 2 to 6 probes around the tumor, using ultrasound or CT guidance
- application of pulsed electrical current between the probes, opening pores in the tumor, causing irreversible damage and subsequent tumor cell death

#### **Conditions we treat**

The RPCI team uses NanoKnife® to treat primary or recurrent tumors

- within the:
- liver pelvis
- pancreas
  - soft tissues, ie: muscle

#### Meet our NanoKnife® IRE Experts



Boris Kuvshinoff, II, MD, MBA Director, Liver and Pancreas Tumor Center Department of Surgical Oncology



Steven N. Hochwald, MD Chief of Gastrointestinal Surgery Vice Chair, Department of Surgical Oncology

Our liver and pancreas tumor center staff is dedicated to finding the best treatment option for your patient's unique situation."

-Boris Kuvshinoff, MD, MBA

## Could NanoKnife® treatment help your patient?

#### Benefits of NanoKnife®

- A minimally invasive alternative to major surgery
- · Can be performed in conjunction with surgical resection to treat margins
- Shorter hospital stay
- Does not preclude other therapies
- Offers effective option to patients with surgical contraindications

#### Limitations

- Not beneficial for large tumors, greater than 4 cm
- Tumors arising from the intestines
- Not appropriate for all tumor types

#### What sets us apart

- RPCI is the only facility in WNY and one of only 50 in the nation that has experience with this technology.
- Dedicated Liver and Pancreas Tumor Center brings together physicians who focus on liver, pancreas, bile duct and biliary cancers. Patients with these rare and complex malignancies require highly specialized services for diagnosis and treatment.
- · Our Multidisciplinary team considers all possible options when planning each patient's treatment including surgical, radiation, and medical therapies and other ablative treatments.

THAT'S WHY



**Refer a Patient** To refer a patient, or speak with one of our NanoKnife® IRE experts, contact a referral specialist at 716-845-4799

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