



**BRIGHT**  
A brighter future for gastro-  
intestinal & liver cancer patients

## **NanoKnife for the Treatment of Pancreatic and Metastatic Gastro-Intestinal Cancers**

### **What is NanoKnife?**

NanoKnife (also known as Irreversible Electroporation; IRE) is a machine that uses high-voltage electricity to 'kill' tumours and is a less invasive treatment option for patients not suitable for traditional surgery, for example when cancer tumours are close to blood vessels or very close to other organs.

### **How is it performed?**

NanoKnife uses needles which are guided into position around the tumour using ultrasound or CT scans. Once the needles are in the correct position, a strong electric current is passed between them, killing the cancer cells in the tumour without the need for cuts or incisions.



The procedure is performed under general anaesthetic, and takes approximately 90 minutes. Patients usually require just one night in hospital following the procedure – a much shorter stay than those undergoing traditional surgery.

### **Who is NanoKnife Suitable for?**

NanoKnife can be used for locally advanced pancreatic cancer, pancreatic cancer that is very close to (or around) the major blood vessels in the pancreas, and GI cancers that have spread to the liver that are again are not suitable for traditional surgery due to the cancer's location or risk of surgical removal.

The aim of this treatment is to slow the growth of these cancers, which may help some people live longer, as well as help treat symptoms such as pain.

### **NanoKnife at the Royal Surrey Hospital**

We are delighted that BRIGHT are in the process of raising funds for the purchase of a NanoKnife Machine at the RSCH, something we hope to achieve within 2020. Only a few hospitals in the UK have access to this treatment. Having the ability to offer NanoKnife to suitable patients at the RSCH would be a significant improvement for overall patient care.