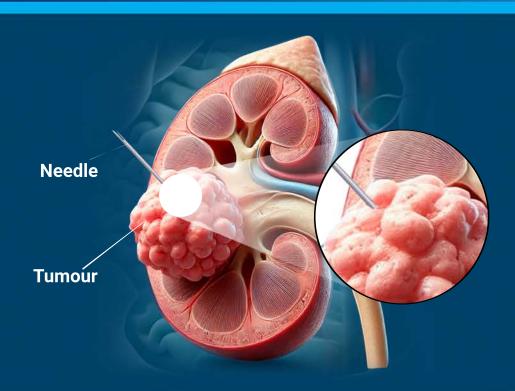
# CRYOABLATION FOR KIDNEY TUMOURS







# FIND AN INTERVENTIONAL RADIOLOGIST FOR CRYOABLATION FOR KIDNEY TUMOURS

Cryoablation offers a minimally invasive treatment option that effectively destroys cancerous cells while preserving healthy tissue. It is performed by <u>interventional radiologists</u>, who use advanced imaging technology to guide the procedure. The <u>Interventional Radiology Society of Australasia (IRSA)</u> can help you find the right interventional radiologist in Australia or New Zealand.

# What is Cryoablation for Kidney Tumours?

Cryoablation is an <u>interventional radiology procedure</u> that uses extreme cold to destroy cancerous kidney tissue.

During the procedure, a special needle (cryoprobe) is inserted into the tumour under image guidance. The cryoprobe freezes the tumour tissue by circulating a freezing agent, typically argon gas, to create extremely cold temperatures. The freezing process destroys the cancer cells, and as the tissue thaws, the damaged tumour cells are gradually reabsorbed by the body.

Cryoablation is a minimally invasive alternative to surgery, offering effective treatment with less downtime and faster recovery.

# Why Would My Doctor Refer Me for This Procedure?

Your doctor may refer you for cryoablation if you have a kidney tumour that is small or localised and if surgery is not the best option for you. Cryoablation is particularly beneficial for patients who may not be ideal candidates for surgery due to age, health conditions, or personal preference.

This procedure is often used for patients with early-stage kidney tumours, including those with renal cell carcinoma (the most common type of kidney cancer), or for patients with other small renal masses. Cryoablation is designed to treat the tumour while sparing as much of the healthy kidney tissue as possible.

# Wondering If You Qualify for Cryoablation?

Not all kidney tumours are suitable for cryoablation. To determine if this procedure is right for you, your doctor will evaluate several factors, including:

- The size and location of the tumour
- The type of kidney cancer (such as renal cell carcinoma)
- Your overall health and medical history
- Your preferences regarding treatment options

If you are not a candidate for surgery or prefer a less invasive approach, cryoablation might be an option. Your interventional radiologist will guide you through the evaluation process to determine if cryoablation is appropriate for your specific condition.



# **ABOUT THE PROCEDURE**

#### **Diagnosis**

Before cryoablation, a thorough diagnosis is made using imaging studies such as CT scans, MRIs, or ultrasounds to determine the size, shape, and location of the kidney tumour. These images help your doctor evaluate the tumour's suitability for cryoablation and plan the procedure accurately.

# **Preparation**

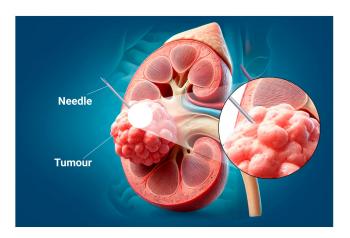
Before the procedure, your interventional radiologist will provide specific instructions on how to prepare. This may include:

- Fasting for a certain period before the procedure
- Stopping blood-thinning medications, if applicable
- Ensuring any chronic health conditions, such as diabetes or hypertension, are well-controlled

You'll likely undergo pre-procedure testing to ensure your kidney function and overall health are suitable for cryoablation.

# **Procedure**

Cryoablation is usually performed under conscious sedation or general anaesthesia. The interventional radiologist will insert one or more cryoprobes through small incisions into the kidney tumour using image guidance, such as CT or ultrasound. The cryoprobes will freeze the tumour in cycles, alternating between freezing and thawing. The entire procedure typically takes 1-2 hours, depending on the size and number of tumours being treated.



# Recovery

After the procedure, most patients can return home the same day or after a short hospital stay. You may experience mild discomfort or bruising at the needle insertion site. Most patients can resume light activities within a few days and gradually return to their normal routine over the next 1-2 weeks.

#### **BENEFITS OF CRYOABLATION**

Cryoablation offers several key benefits for treating kidney tumours:

# Minimally invasive

No large incisions are required, which means faster recovery and less pain compared to traditional surgery.

# Organ preservation

Cryoablation targets only the tumour, leaving healthy kidney tissue intact, which helps preserve kidney function.

#### Quick recovery

Patients often return to normal activities within days rather than weeks.

# Effective tumour control

Cryoablation is highly effective in controlling small, localised kidney tumours.

# Reduced risk

Like other interventional radiology procedures, this carries fewer risks than traditional surgery, particularly for older patients or those with other medical conditions.

# **RISKS OF CRYOABLATION**

While cryoablation is considered safe and minimally invasive, it is a medical procedure and there are some risks to consider:

# Bleeding

There is a small risk of bleeding at the needle insertion site or around the kidney.

# Infection

Although rare, there is a risk of infection, which can be treated with antibiotics.

# • Damage to nearby structures

The freezing process can potentially affect nearby organs or tissues, though this risk is minimised with careful imaging guidance.

# Incomplete treatment

In some cases, not all of the tumour may be destroyed, which may require additional treatment.

# Kidney function

Although cryoablation spares healthy tissue, there is a small risk of kidney function decline in rare cases.

Your interventional radiologist will explain the risks and benefits of the procedure in detail and address any concerns you may have.



# When Can I Expect Results?

Most patients notice significant improvement within days or weeks of the cryoablation procedure. Follow-up imaging studies, such as CT or MRI scans, will be performed a few months after the procedure to ensure the tumour has been effectively treated. Over time, the frozen tumour tissue will shrink and be reabsorbed by the body. Depending on the results, additional follow-up or monitoring may be recommended.

# **Find a Doctor**

Finding the right specialist is crucial for ensuring a successful cryoablation procedure. Use <u>IRSA's</u> "Find a Doctor" tool to locate experienced interventional radiologists in Australia or New Zealand who specialise in cryoablation for kidney tumours. This tool allows you to search by location and area of expertise, ensuring you find the most qualified professional for your needs.

# **FAQs**

# How effective is cryoablation for kidney tumours?

Cryoablation is a highly effective, minimally invasive treatment for small, localised kidney tumours. When performed by an <u>experienced interventional radiologist</u>, the procedure offers a targeted approach to destroy cancerous tissue while preserving healthy kidney function. Follow-up imaging, such as CT or MRI scans, is crucial to ensure that the tumour has been completely treated. Success rates are particularly high for early-stage tumours, making cryoablation an excellent option for patients who are not ideal candidates for surgery.

# Is cryoablation painful?

Cryoablation is performed under conscious sedation or general anaesthesia, which ensures that patients experience minimal discomfort during the procedure. Most patients report feeling relaxed and pain-free while the interventional radiologist performs the cryoablation. After the procedure, you may experience mild soreness or bruising at the needle insertion site, but this typically resolves within a few days. Your interventional radiologist will prescribe pain relief if necessary and provide specific aftercare instructions to manage any post-procedure discomfort.

# How long does it take to recover from cryoablation?

As this is a minimally invasive IR procedure, recovery from cryoablation is generally quick and less intense compared to traditional surgery. Most patients can resume light activities within a few days, with a full return to normal routines within 1-2 weeks, depending on individual recovery. Your interventional radiologist will monitor your recovery closely and advise on any precautions you should take. Because cryoablation is minimally invasive, there is typically less post-procedure pain, and the shorter recovery period allows you to get back to your daily life sooner.

# Who is a good candidate for cryoablation?

Cryoablation is best suited for patients with small, localised kidney tumours, especially those who are not ideal candidates for surgery due to age, underlying health conditions, or personal preference. This procedure is often recommended for patients with early-stage renal cell carcinoma or other small renal masses. Your interventional radiologist will evaluate your condition, including tumour size, location, and overall health, to determine whether cryoablation is the right treatment option for you.

# How soon can I return to normal activities after cryoablation?

Most patients can return to light activities within a few days of undergoing cryoablation. The recovery time is generally faster compared to traditional surgical methods because the procedure is minimally invasive. Depending on your individual recovery, you may be able to resume your normal routine within 1-2 weeks. Your interventional radiologist will provide personalised post-procedure care instructions and guide you on how to gradually return to your usual activities.

# How can I find an interventional radiologist for cryoablation?

Finding a qualified interventional radiologist with expertise in cryoablation is crucial for achieving the best outcomes. IRSA's "Find a Doctor" tool is designed to help you locate experienced interventional radiologists in Australia or New Zealand who specialise in this procedure. The tool allows you to search by geographic location and area of expertise, ensuring you connect with the right specialist for your needs.