

Patient information leaflet

## **Extracorporeal Radiotherapy to Bone**

Extracorporeal radiotherapy is the use of radiation to treat your affected bone when it is outside your body. It is used to treat both cancerous (malignant) and non-cancerous (benign) bone conditions.

### **What is Radiotherapy?**

There are different types of radiotherapy. In this case, it is the use of high energy X-rays (radiation). The X-rays will affect any cells and stop them dividing and growing (i.e. kill them).

Radiation can cause some damage to the tissues surrounding the area we want to treat. Extracorporeal radiotherapy allows us to treat your bone after it has been removed from your body. This means we can deliver a high dose of radiation without affecting any other parts of your body. The radiotherapy team will ask you to sign a consent form for the radiotherapy part of the operation.

### **How is my bone removed?**

As part of the planned operation discussed with your surgeon, the affected bone or part of the bone will be removed in theatre. Other tissues or tumour may be removed at the same time. You will be under a general anaesthetic. Your surgical team will explain everything and ask you to sign a consent form for the operation. Please ask them if you have any questions.

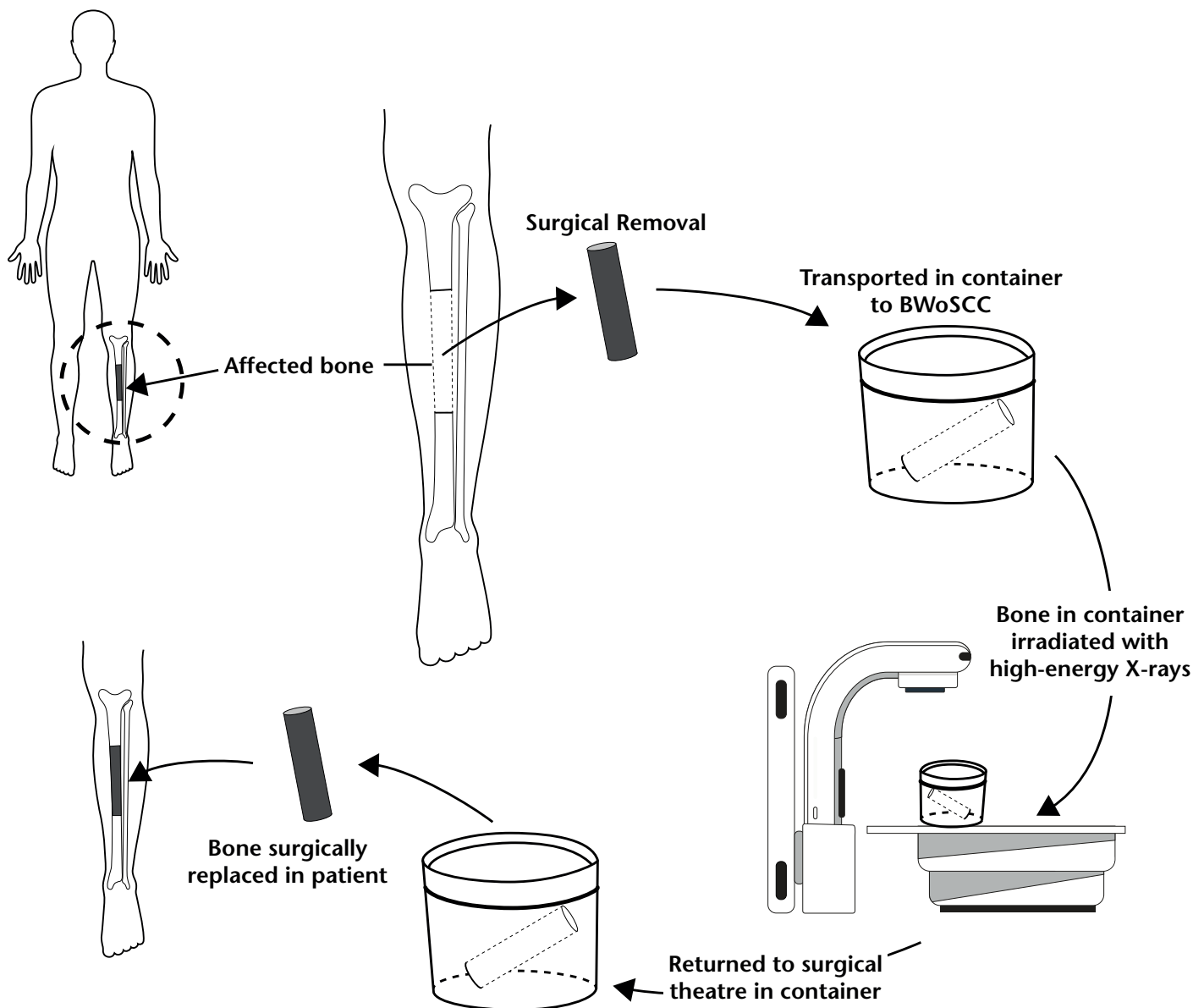
### **What happens to my bone after it has been removed?**

Once we remove your bone, we transport it to the Radiotherapy Department at The Beatson West of Scotland Cancer Centre. We treat it with radiotherapy and return it to the surgical operating theatre. We will then re-implant it back into your body. You will remain under anaesthesia the whole time.

### **What happens at The Beatson West of Scotland Cancer Centre?**

Radiographers will deliver radiotherapy to your bone using a machine called a linear accelerator. The treatment takes around 10 minutes, however the whole process is likely to last around 1 hour.

# The Radiotherapy Process



## Are there any side effects from the radiotherapy?

The bone is treated with radiotherapy to kill all living cells within it. The bone becomes dead and will not be able to grow longer. There is no obvious change in the appearance of the bone. It remains strong and will still provide support.

We do not anticipate any side effects from the radiotherapy.

## Will I have to stay in hospital?

Your recovery from the operation will require a hospital stay and rehabilitation. There may be surgical risks. The surgical team will discuss this with you.

## Where can I get help?

If you have any questions or concerns, please speak to your surgical team. They will be able to involve staff at the Beatson if necessary.

Leaflet written by J. Scott, H. Reid, F. Cowie June 2022

Reviewed by H. Reid and J. Scott June 2024

Approved by H. Reid June 2024

Review June 2026

mi • 337411 v2.0