

Radiotherapy Department

Information for patients receiving intraluminal radiotherapy (ILT) to the lung

Radiotherapy on the microselectron

Please attend the hospital on the day stated for treatment. Several different forms of treatment are carried out on the Microselectron machine and this leaflet sets out to answer some of the questions you may have.

You will not normally have to stay in The Christie overnight. However, we recommend that you bring an overnight bag in case you feel unwell after your treatment and need to stay in The Christie.

What is the Microselectron?

The Microselectron is a radiotherapy machine. It contains a miniature source of radiation which can be carefully introduced into the body to give a localised treatment to the tumour. The source is removed when treatment is complete. Some people worry about radioactivity, however when the treatment is finished you will not in any way be radioactive.

What is ILT?

Intraluminal treatment is a method of giving treatment directly to the affected area by placing a fine tube into the lung using a bronchoscope (flexible fibreoptic instrument).

What are the benefits of ILT?

ILT clears the tumour from the airways allowing more air to reach the lungs and reduces symptoms such as coughing and bleeding. It delivers a high dose of radiotherapy directly to the cancer with little dose to the surrounding tissues.

Consenting to treatment

We will ask you to sign a consent form agreeing to accept the treatment that you are being offered. The basis of the agreement is that you have had The Christie's written description of the proposed treatment and that you have been given an opportunity to discuss any concerns. You are entitled to request a second opinion from another doctor who specialises in treating this cancer. You can ask your own consultant or your GP to refer you.

Your consent may be withdrawn at any time before or during this treatment. Should you decide to withdraw your consent then a member of your treating team will discuss the possible consequences with you.



What are the side-effects of ILT?

The bronchoscopy procedure itself can cause a temporary sore nose or throat. It is possible to develop palpitations during the bronchoscopy but your heart will be closely monitored by the medical staff during the procedure. Sometimes breathlessness can result during the procedure and oxygen might be administered. Very rarely, respiratory failure can result which may be life-threatening.

Sometimes the bronchoscope may cause local irritation and trigger off some fresh bleeding in your phlegm. A small amount is expected up to 1 to 2 weeks later but any fresh bleeding beyond this should be reported to your doctor or specialist nurse. Rarely the procedure can trigger heavier bleeding which can be life-threatening.

A dry cough is common in the first few days after treatment. It is possible to develop a chest infection after a bronchoscopy and you should seek medical advice straight away if you develop discoloured phlegm or new breathlessness. Occasionally, over a period of many months, the airway can narrow leading to recurrent chest infections.

Are there any alternatives to this treatment?

There are other treatments which can be used to deliver treatment inside the airways such as laser, stents and PDT (photo dynamic therapy). It is sometimes better to use external radiotherapy. Your doctor will discuss this with you.

What would happen if I had no treatment?

Your symptoms may get worse and your tumour will continue to grow.

What do I need to take to the hospital?

It's best to wear loose-necked, everyday clothing. You will not need to get changed into nightwear.

Please bring with you:

- any medication you are taking at the time
- an overnight bag, in case you need to stay in The Christie after treatment
- if possible, your NHS number (on your medical card).

What to do on the day you come for treatment

On the day you are having treatment you may have a light breakfast, such as tea and toast. If you usually take any medication in the morning, take it at breakfast time. You should have nothing else to eat or drink after 9am.

Will I need to stay in The Christie?

No, you will not usually have to stay in The Christie. You can go home the same day. The doctor will need to examine you before treatment begins, so a bed will be reserved for you for that day. If you need hospital transport, please remember that you will be returning home the same day.

A relative or friend may accompany you to The Christie. They will not be able to stay with you during treatment, but they can wait in the BMRU (department 16) until your return. If you are coming by hospital transport someone can come with you if there is room. However, if you do need to stay overnight, they will have to make their own return travel arrangements.

How is the treatment given?

You will be admitted to the BMRU (department 16), but you will have your treatment in the radiotherapy theatre suite. When you arrive on the unit you will be seen by a doctor who will explain the procedure to you and ensure you have had blood tests.

If you need to have a chest x-ray, this will be taken before the ILT. When you are on the unit, the staff will insert an intravenous cannula (small tube) in your arm. This will be used later when you are in radiotherapy theatre to give you some medication to sedate you. You will also be given local anaesthetic to numb your throat and nose.

In the radiotherapy theatre, you will have a bronchoscopy and if the doctors think it is suitable to deliver ILT treatment, a very narrow treatment tube will be inserted through the bronchoscope and left in place. A chest x-ray will be taken to make sure the tube is in the right place, and the tube will be connected to the microselectron for treatment.

Once the treatment is finished the tube will be removed. We will ask you not to eat or drink anything for one hour after treatment to allow the anaesthetic to wear off.

How long will the procedure take?

From start to finish the whole procedure takes about one hour. The treatment time will be on average 15 minutes, but this can vary from one patient to another.

Will the treatment hurt?

The bronchoscopy can be uncomfortable for some patients but the local anaesthetic should reduce any discomfort and the sedation should help with this. The treatment itself is painless. You will be awake during the treatment but will probably feel drowsy and remember little about the procedure.

After the treatment

When you return to the BMRU we will ask you to remain there for at least one hour while the anaesthetic wears off. After that time, we will give you a drink of water and if you are able to tolerate this, you can have a hot drink. Shortly after this you may have something to eat. A doctor will see you before you leave the ward to make sure that you are well enough to travel home. You cannot drive or operate any heavy machinery until the following day. You will need a friend or relative to take you home or hospital transport can be arranged (please contact Radiotherapy Theatre in advance on **0161 446 3520**).

When will I start to feel better?

- The treatment can take from two to four weeks to start to have an effect. Following the bronchoscopy, you may get a cough. If you already had a cough before you had your treatment, this may worsen.
- Please ask the BMRU staff for advice before leaving as medicines can be prescribed to relieve the cough. If you have any problems when you get home please get in touch with your GP.
- After about four weeks these side effects will subside and you should begin to feel some benefit from your treatment. The amount of benefit gained can vary from person to person.

At home

After your discharge, if you have any concerns or worries about the treatment, please contact your key worker (lung cancer nurse) at your local hospital. Or you can contact the specialist nurses at The Christie on **0161 446 3018** or **0161 918 7473**. About six weeks after your treatment, you will be sent an appointment for your next outpatient visit. This can vary and will depend on advice by your doctor at The Christie.

Contacts

If you have any queries about your treatment or your visit to The Christie please do not hesitate to ask. Phone the radiotherapy theatre suite on **0161 446 3522**.

Further information

- Macmillan Cancer Support
Freephone 0808 808 0000
www.macmillan.org.uk
- Roy Castle Lung Foundation
Patient Helpline: **0333 323 7200**
www.roycastle.org

If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact [**patient.information@christie.nhs.uk**](mailto:patient.information@christie.nhs.uk)

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for
urgent support and specialist advice
The Christie Hotline: 0161 446 3658
Open 24 hours a day, 7 days a week

