

# Radical Radiotherapy

## A guide for patients with lung cancer

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### Introduction

You have recently been diagnosed with lung cancer and your doctor has discussed the option of a course of **radical radiotherapy**. This is a high dose of radiotherapy that is given to people with lung cancer that has not spread outside the lung. This information leaflet is designed to advise you of what to expect before, during and after treatment.

### Your radiotherapy

Radiotherapy is the use of high energy X-rays to destroy cancer cells while doing as little harm as possible to normal cells. The treatment is painless and you will not see or feel anything whilst the treatment is being delivered.

Radical radiotherapy is given in **15 or more doses or fractions over a number of weeks depending on your type of treatment**, every day, Monday to Friday. However, not everybody will start treatment on a Monday.

#### 1st preparation visit

The radiotherapy planning starts with a CT scan of your chest. This scan takes place at the radiotherapy CT scanner in the oncology department. This scan is performed either with your arms supported above your head or sometimes in a mask with your arms by your side. Sometimes the doctor may like you to receive an injection of contrast dye which helps them plan your treatment. Once the scan is complete the radiographers will draw marks on your chest as reference points. The centre of these marks will be made permanent with a tiny tattoo. This is made with a small pinprick. We use the information from this CT scan to target the radiotherapy to your cancer.

#### 2nd preparation visit

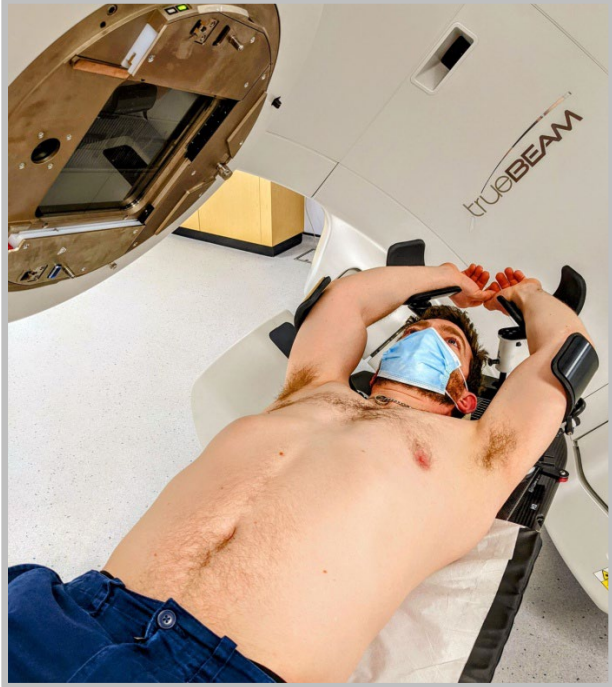
Depending on how your treatment was planned you may need to come back to the CT scanner a second time. Here we check the plan the doctor has created and draw some more marks on your chest and one more tattoo. Your radiotherapy treatment may start the same day or a few days later.

### Treatment

Radiotherapy is painless and each treatment takes about 10 minutes but there may be a short wait in the department before you are taken. The radiographers will talk you through the treatment on the first day.

You will be positioned on the couch just as you were in the first CT scan and the radiographers will carefully adjust you for your treatment. Once you are in the correct position, it is important that you stay still, but continue to breathe normally.

The treatment machine will move around you to the start position and the radiographers will leave the room to treat. Although you will be alone in the room, the radiographers monitor you the whole time by CCTV cameras. When the machine is on it will move around you in a circle, you will hear a buzzing noise, but feel nothing. The radiographers may adjust your position from outside the room, so if you feel the couch move occasionally, this is normal. The radiotherapy is painless and you will not be radioactive, but it does have some side-effects.



## Side effects of radiotherapy: Short-term

### Tiredness

Radiotherapy can cause tiredness. This is a common side effect and can last a while after treatment.

### Cough

You may notice you develop a cough that produces more phlegm than usual. This may contain flecks of blood, and is quite normal.

### Skin irritation

Some people can develop a skin reaction in the area they are treated. This can become red and itchy, especially on the back. The radiographers and nurses will advise you how to take care of your skin.

### Pain on swallowing (oesophagitis)

Radiotherapy causes inflammation of the gullet, which makes it painful to swallow. This can start about **3 weeks** into the course of radiotherapy, when you may notice a slight discomfort as you try to swallow food and/or drinks. We will monitor this and give you medicines to help. We recommend eating a softer diet during this time, and we can give you further dietary advice if needed. It may continue for some weeks after radiotherapy is finished but then rapidly improves.

Occasionally swallowing becomes very difficult and some people need to be admitted to hospital to help control symptoms. Very occasionally people may need to be fed temporarily through a tube as an in-patient. Most cases do not need this and we can treat you as an out-patient. Very rarely, radiotherapy can cause a long term scarring of the oesophagus, which may need to be intermittently stretched.

## Side effects of radiotherapy: Long-term

### Inflammation of the lungs (pneumonitis)

This can occur from 1-3 months after you finish your radiotherapy. You might notice that you become more short of breath and/or develop a cough. About 1 in 5 people receiving radical radiotherapy for lung cancer need a course of steroids for this; about 1 in 20 people need oxygen for a time; and in about 1 in 100 people it can be a more serious complication.

### Long-term scarring of the lungs

Over many years the radiotherapy can cause fibrosis or scarring of the lungs. This is why we check your breathing tests before we recommend radical radiotherapy. Following radiotherapy you may notice that your breathing gradually becomes a little worse. **This is one of several reasons why we recommend you stop smoking.**

## Your progress

You will be assessed by a nurse or radiographer every week during radiotherapy. Once your radiotherapy is completed, your lung cancer nurse will phone you on weeks 2 and 4 after treatment, before arranging an appointment in the nurse led clinic 6 – 8 weeks after treatment. This is to check that you are recovering from the side effects of your treatment. You will then be seen 3-4 months later by your Oncologist with a CT scan of your chest and abdomen to assess the response to treatment.

## Contact details

- You can contact your clinical nurse specialist for support and advice during office hours Monday – Friday, 9am to 5pm. You may need to leave a message but they will get back to you.
- If you have any problems during your treatment or up to 6 weeks after, you can call this number when you need out of hours help and advice:

**Cancer Treatment Helpline - 0800 917 7711**

- If you would like help to stop smoking, **free** advice is available from:  
**Quit Your Way - 0800 84 84 84** - or from your local pharmacist or GP.

### Cancer Treatment Helpline - 0800 9177711

If you have any problems during your treatment or up to 6 weeks after, you can call this number if you need advice. This is a 24 hour service.

## Patient Transport

Booking-line: 03000 13 4000 (option1, option1)

