

Having radical radiotherapy for lung cancer

Your doctors have recommended that you have radiotherapy for the treatment of lung cancer (which may be combined with chemotherapy and/or surgery). This factsheet explains your radiotherapy treatment, what the treatment involves and the possible side effects during and after treatment. We will give you a separate factsheet about any chemotherapy you might have. There are different types of lung cancer, and your doctor will discuss how they hope the radiotherapy treatment will benefit you.

What is radiotherapy?

Radiotherapy is the treatment of cancer using high energy x-rays. It is given from outside the body by a machine called a linear accelerator. You cannot feel treatment delivery. It is directed at the area needing treatment and takes about 10–20 minutes to deliver the treatment. This type of radiotherapy does not make you radioactive and it is safe to be with other people, including children, during your treatment.

How does radiotherapy work?

Radiation damages cells that grow and divide rapidly. Only the cells in the area of the body receiving treatment are affected, and modern treatment methods mean that we can avoid treating normal cells as much as possible. The healthy, normal cells can repair, and it is hoped that the abnormal, cancer cells cannot recover.

What happens now?

We will ask you to sign a consent form that confirms that you agree to receive this treatment. You can change your mind at any time; however we strongly recommend that you complete a course of treatment once you have started.

Planning your radiotherapy treatment (pre-treatment)

Before starting the radiotherapy, we will need to carry out a CT scan while you lie in the treatment position so we can design the radiotherapy according to your individual needs. Please see The Royal Marsden factsheet *Having radiotherapy CT planning* for further information and to check what time you need to arrive before your scheduled appointment, so that we can explain about the scan and make any other preparations needed. The treatment will be planned specifically for you, to make sure that the area for treatment is accurately targeted with the least amount of normal tissues included. This planning can sometimes take up to four weeks to complete.

The CT planning session will usually take about 30 minutes. Afterwards, a time and date to start the radiotherapy treatment will be confirmed. Your treatment start date will be the earliest time that we can safely have the planning completed or may be scheduled to fit in with chemotherapy.

Radiotherapy treatment

You will need to report to the receptionist in the Radiotherapy Department every day when you arrive. The receptionist will let the radiographers working on your machine know that you have arrived. On your first visit, the radiographers will set aside some time to talk you through the treatment and answer any extra questions you may have, so please arrive 20 minutes before your treatment time on that day.

You will receive your radiotherapy treatment every day, Monday to Friday. A course of treatment can take between three and six and a half weeks.

At each visit, the radiographers will position you on the treatment couch as you were for the planning scan. The radiographers will explain what they need to do or will ask you to make small movements so that the marks that were put on your skin during the planning stage line up with laser lights in the treatment room. When they are happy with the position, the staff will leave the room to deliver the treatment.

The radiographers can see and hear you at all times when you are in the treatment room. If you have any problems, they will advise you to call out or raise your hand for attention and they will come in to help you. Some treatment machines have background music playing to help you feel more comfortable. The radiotherapy machine will move around you into different positions but it will not touch you and although you can hear a buzzing noise when the treatment is being delivered, you will not be able to feel anything happening. Please see our policy on monitoring in radiotherapy in The Royal Marsden booklet *Radiotherapy, your questions answered*.

Care during your course of treatment

The radiographers who you see each day can give you advice if you have any problems. They can also contact someone from the radiotherapy team to come and see you for specialist advice. Other members of the team include the clinical nurse specialists, dietitians and radiotherapy nurses. You will have regular blood tests and you will be seen in a clinic each week to make sure that you are managing your treatment.

Research has shown that radiotherapy is less effective if you smoke. Smoking will also increase the side effects of radiotherapy. Please ask if you want help to give up smoking during your treatment.

Side effects

Side effects can occur during the treatment or can appear several weeks after the treatment

Early side effects (occurring during or one to two weeks after treatment)

- **Fatigue (tiredness)** - is common and can often be made worse by having to travel to hospital each day. The tiredness will slowly improve after your treatment has finished.
- **Skin reaction** – it is unlikely that you will get a skin reaction, but the skin in the treatment area may become pink, or if you have more pigmented skin, it may become darker. You can use a light moisturiser on the skin in the treatment area.
- Avoid using very thick or medicated creams. During your treatment, you can continue with your routine skin care and wash the area being treated.



- **Soreness and pain** – the lining of your throat or oesophagus (food pipe) may become inflamed during the course of radiotherapy. This can feel sore and may make swallowing uncomfortable. It can be controlled with medicines and painkillers.
- **Cough** – your windpipe (trachea) can also become slightly irritated during radiotherapy, and this may cause a tickly cough.
- **Cough and breathlessness** - occasionally these symptoms can worsen due to inflammation of the lung.

All these symptoms will settle within a few weeks of completing the treatment.

Late side effects (from one month after treatment)

- **Scarring within the treated lung** - this may result in increased breathlessness at a later stage. If the rest of your lungs are working well, you may not notice any change in your breathing.
- **Scarring and thickening of the oesophagus** (food pipe) - this can cause problems swallowing but can be improved by a stretching procedure.

Other very uncommon side effects will be listed in your consent form. Please remember that these are possible side effects and you may not experience any of them.

Follow up after your treatment

We will usually see you in clinic 4–6 weeks after the end of your treatment or you may be seen in the hospital where you were first diagnosed. Further follow up will be arranged at that time. Please make sure you ask any questions you need to and that you understand what you have been told. If you would like any explanation repeated, the radiotherapy team is happy to do so – there is a great deal of information to take in during one session.

Contact details

Clinical secretaries for Consultants

Dr F. McDonald:	020 8915 6083
Dr I. Locke:	020 8661 3169
Dr M. Ahmed:	020 8661 3374

Lung Cancer Specialist Nurses

Sutton and Chelsea:	020 3186 5605
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Alternatively, please call:

The Royal Marsden Hotline: (available 24 hours a day, 7 days a week)	020 8915 6899
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If you need to change your radiotherapy appointments, please phone:

The Sutton radiotherapy bookings team:	020 8915 6018
The Chelsea radiotherapy bookings team: (Monday to Friday, 9am – 5pm)	020 7808 2374

