

Radiotherapy pre-treatment CT – Lung radiotherapy

Your doctor has recommended that you have a course of radiotherapy. This fact sheet explains what you can expect when you come for your radiotherapy CT pre-treatment appointment. If you feel unsure about anything, please discuss it with the radiographers.

What is radiotherapy CT planning?

A radiotherapy CT planning scan is part of the preparation for the course of radiotherapy. This CT scan is only used to plan your radiotherapy and is not used for making a diagnosis. The images from the scan will give us information about your individual anatomy and are used to produce your personalised radiotherapy plan.

What preparation do I need for the scan?

Questionnaires may need to be completed on the My Marsden App prior to your appointment. For non-users, they will be given to you when you arrive.

You may need some preparation for your radiotherapy CT planning scan. Details below:

During your scan you may be given an injection of contrast media which helps to provide clearer images.

Do not have anything to eat for **TWO** hours before your scanning time.

You can drink as normal.

On arrival you may have a cannula (thin plastic tube) inserted into a vein to inject the contrast.

What will happen when I arrive for my appointment?

When you arrive, a radiographer will confirm your identity and explain the procedure.

As radiographers, it is our professional duty and legal responsibility to ensure that we protect individuals from unnecessary exposures to radiation. This is particularly relevant when considering any potential risk during pregnancy.



A Radiotherapy Pre-Radiation Safety Form will need to be completed by all patients aged between 11 and 55 years. This will be available for you to complete on the My Marsden app or when you arrive for your appointment.

What happens during the scanning process?

We will ask you to remove clothing in the area for treatment and put on a gown. You will then need to lie on the scanner couch in a position that allows your radiotherapy treatment to be directed at the correct area. Sometimes we will use special equipment to help you stay in position. You will need to lie still, so please tell the radiographers if you are uncomfortable. If any special breathing instructions are required during the scan, the radiographers will discuss this with you.

Once you are in position, we may put pen marks and stickers on your skin in the area being scanned. These will show up on the scan and are used to help us direct your treatment. These stickers indicate the position of the tiny permanent reference marks (tattoos), that you may be given at the end of the scan. The tattoos are used for the accurate day-to-day set-up of your treatment. The tattoos are produced using a fine sterile needle to insert a little ink under the skin surface. If they are required, you will be asked for consent.

To scan the treatment area, the couch will move smoothly in and out through the scanner. The radiographers will be outside of the room as the scan is carried out, but they are able to see, hear and speak to you at all times.

During the set up for the scan and once the scanning is complete, we may take some photographs to show your position on the couch and the position of any supporting equipment. The photos will be used along with written instructions to help us to reproduce your position accurately for your treatment. These digital photographs will only be available in your electronic treatment notes for viewing by the doctors and radiographers supervising your treatment.

If you have any concerns about your privacy or dignity during the CT planning procedure, please discuss this with the radiographers before the CT procedure begins.

What happens after my scan?

You will be given your radiotherapy treatment appointments before you leave the department. If you have had contrast for your scan, you will be asked to stay in the hospital for 30 minutes.

Contact details

If you have any questions or concerns about your scan or your treatment, please contact your clinical nurse specialist or clinical oncology consultant team.

Alternatively, please call:

The Royal Marsden Hotline: 020 8915 6899
(available 24 hours a day, 7 days a week)

If you are unable to attend your appointment or need to reschedule it, please call the radiotherapy bookings team.

Sutton 0208 915 6018 (Monday to Friday, 9am-5pm)

Chelsea 0207808 2374 (Monday to Friday, 9am-5pm)

Further guidance and information can be found <https://patientinfolibrary.royalmarsden.nhs.uk>

