

Nuclear Medicine Department

Information about your PET-CT scan

What is a PET-CT scan?

PET-CT (Positron Emission Tomography with Computerised Tomography) is a scanning method that allows us to see how organs are working and helps us identify abnormalities in the body. For this scan we will give you an injection containing a small amount of radioactivity called a tracer.

Is there any preparation for my PET-CT scan?

- You must tell us in advance if you know you are (or think you may be) pregnant, or breast feeding.
- If you are diabetic, please make sure you tell us when you phone to confirm, so that we can give you more detailed instructions about eating and your medication. Please read the information for diabetic patients, which is enclosed with this letter.
- You should continue to take your usual medications on the day of the scan. Please bring a list of your current medication with you.
- Do not eat anything for 6 hours before your appointment time. You should drink plenty of plain water during this time. Avoid all other drinks to include flavoured water, tea, coffee etc.
- You should not drink any alcohol for 24 hours before your appointment.
- Please avoid strenuous exercise for 24 hours before your appointment, for example, running, cycling, or gym exercise.
- Please try to leave all jewellery at home, as you will need to remove all metal for the scan. We suggest you wear loose fitting, comfortable clothes to avoid having to change into a hospital gown.
- Please allow plenty of time to get to your appointment, as the tracer is individually ordered for you and has a very short shelf life, so scans cannot normally be delayed.
- Please do not bring along anyone who is pregnant or under 18 years of age.
- You should expect to be in the department for 2 to 3 hours.

What happens during my PET-CT scan?

Our staff will fully explain the procedure to you when you arrive for your appointment. A cannula (small tube) will be inserted into a vein in either your hand or arm, and then the radioactive tracer will be given through it. The cannula will remain in place until the scan is complete.



If you have a central venous line (either a PICC or Hickman® line), we will be able to give you both injections through it. If you have a Totally Implanted Vascular Access Device (TIVAD or Portacath®) you will need to attend the blood room before your appointment in order to get it accessed.

You will then be asked to sit and relax quietly, alone, for 60 to 90 minutes before having the scan. In most cases you can listen to music, but you will not be allowed to read. This is because reading, or having a relative with you who is talking, can affect where the tracer goes in the body, and we want to avoid these changes.

Just before the scan begins you will be asked to empty your bladder. We will then ask you to lie on the scan bed, with your arms raised above your head, or by your sides. We will make sure you are as comfortable as possible for the scan, as it is extremely important that you remain as still as you can.

We may also give you some X-ray dye (contrast agent) during the scan. This is a colourless fluid that gives us more detailed images of your body. If you have this X-ray dye you will be asked to remain in the hospital for 30 minutes after your scan has finished.

Most scans last between 30 to 45 minutes.

Will I feel anything during my scan?

There are no side effects from the tracer injection, it will not make you feel sleepy or affect your ability to drive.

If you are given the contrast agent, you may feel a warm sensation, but you should not feel any discomfort during the scan.

If you are in a lot of pain or find it difficult to keep still – please tell us.

What happens after my PET-CT scan?

We will ask you to sit in the waiting room for about 15 minutes while we check the technical quality of your scan, and that we have all the information we need.

Continue to drink plenty of fluid for the rest of the day, and empty your bladder regularly.

A radiologist will report the scan and then the results will be sent to the consultant who referred you. We will not be able to give you any results on the day.

How safe is the examination?

There are small risks associated with radiation from the tracer that you have been given. However, the images give the doctors important information about your condition that helps in your treatment. The benefits of the information from the scan outweigh the small risks from the exposure to radiation.

As is possible with all medication, a small number of people may be allergic to the contrast agent, although this is rare, and usually mild. Please tell the staff attending to you if you have any allergies.

For the rest of the day following your scan, you should try to avoid long periods of close contact with other people. This is to minimise their exposure to a small, but unnecessary, dose of radiation.

What are the benefits of my PET-CT scan?

A PET-CT scan allows us to perform two types of scan at the same time, without movement, giving us a more complete picture of your body. It allows us to look at both the structure (what it looks like) and function (how it works) of the organs and tissues. It is very detailed and sensitive, so will help the doctors looking after you to monitor your treatment.

What happens if I decide not to have a PET-CT scan?

If you decide not to have the PET-CT scan, then please discuss this with the doctor who is looking after you.

Please attend promptly at the time shown on the attached appointment letter.

If you have any questions about this appointment or any questions about the examination, please telephone the number below:

0161 446 3942 or 3946

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

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

