

PET-CT scan

What is a PET-CT scan?

A PET-CT scan is a combination of a PET (positive emissions tomography) scan and a CT (computerised tomography) scan. Cancer cells are usually more active than other cells, so they show up on the scan. The PET scan shows how active cells are in different parts of the body. The CT scan takes a series of pictures (x-rays) to build this information into 3D pictures of the inside of body.

Why do I need to have this scan?

Doctors might use a PET-CT scan to show:

- if a lump or abnormal area is cancer or not
- the size of a cancer and if it has spread
- how well cancer treatment is working.

What happens?

Before the scan

The hospital sends you information about the scan so you know what to expect. You will probably be asked not to eat or drink anything except water for six hours before the scan. This depends on the part of your body that is being scanned. You may also be asked to eat a low-carbohydrate diet for 24 hours before the scan. Carbohydrates are foods like potatoes, bread, rice, pasta or cereal. If you are diabetic, talk to the hospital before the scan, as you need to make sure your blood glucose is well controlled. You will be told all of this before your appointment.

On the day of the scan, the person doing the scan (radiographer) will explain what will happen. You can ask them any questions you have.

You can usually wear your own clothes if they don't have metal zips or buttons. If there is any chance you might be pregnant, let the radiographer know.

The radiographer will give you an injection of a slightly radioactive glucose (type of sugar). This is usually given into a vein in your arm or hand. The radioactive glucose helps show up the activity of cells in the area being scanned.

After the injection, you usually rest for about an hour before the scan. This gives the glucose time to go around your body. You will usually be asked to go to the toilet to empty your bladder just before the scan.

During the scan

You lie on a narrow bed that moves into the scanner. The scan usually lasts for around 30 minutes. Having a PET-CT scan is not painful, but lying still on the bed can be a bit uncomfortable. Tell the radiographer if you think you might find it difficult to lie still.

The radiographer leaves the room during the scan, but can see you through a screen. You can talk to them through an intercom while you are having the scan. You can also listen to music through headphones.

After the scan

You can usually go home straight after the scan.

The radiographer will tell you about any precautions you need to take. For example, they might ask you to avoid being near pregnant women and young children for the rest of the day. This is because the glucose injection contains a low dose of radiation. After this time, you can be around people as normal.

Any test using radiation can slightly increase your risk of developing cancer when you are older. However this is not common, and the risk is very small compared to the benefit of having the test. Your doctor can tell you more about this.

It can take 1 to 2 weeks to get the results. Waiting for test results can be a worrying time. Talking to your family and friends about how you feel can help. You can also speak to your doctor or nurse if you have any problems, or need more support.