

The ROYAL MARSDEN

NHS Foundation Trust

Having a Gallium DOTATATE PET/CT scan

Nuclear Medicine

Patient Information



NHS

Introduction

Your doctor has recommended that you have a Gallium DOTATATE PET/CT scan. This is a nuclear medicine test combining a PET scan and a CT scan.

What is positron emission tomography (PET)?

PET is a medical imaging technique in which a radioactive tracer is injected into a vein. The tracer used for this PET scan is DOTATATE, which binds to receptors on the cells of neuroendocrine tumours. This radioactive tracer has a short shelf life and is made on the day of the scan. Appointments may be cancelled at short notice if there are tracer production problems.

What is CT?

A CT (Computerised Tomography) scan uses x-rays to produce images of the body. By combining PET and CT, we are able to provide important information about many conditions affecting the different organs of your body. This will help your doctor to plan appropriate treatment for you.

Is there any risk from the radiation?

We will expose you to ionising radiation when we carry out this examination. We are all exposed to ionising radiation from naturally occurring sources such as cosmic rays, certain types of soil and rocks and even food we eat. Ionising radiation can cause cell damage that in turn, after many years, may turn cancerous. The radiation associated with your exam will therefore carry a small risk which is less than 0.1%. This risk will be far outweighed by the benefits of having this exposure. We will also tailor the amount of radiation we use to you.

Please read the **Important points** section below. If you have any concerns, please contact us.

What preparation do I need for my Gallium DOTATATE PET/CT scan?

If you are taking **Landreotide** please contact the department as soon as possible to schedule the scan correctly. You can take your remaining medication as prescribed.

No special preparation is required for this scan. You can eat and drink normally. Please refrain from drinking alcohol for 4 hours prior to the appointment time.

How is a Gallium DOTATATE PET/CT scan carried out?

When you arrive at the department, we will take you to a preparation room to lie down on a couch. We will give you a small injection of radioactive tracer into a vein and we will ask you to remain lying down for approximately 60 minutes prior to your scan.

After 60 minutes, we will take you into the scanning room and onto the scanning bed. The scan will take approximately 30–45 minutes. You will be scanned with your arms raised above your head. This is to get the best images possible, but if you are not able to have the arms up you can be scanned with your arms by your sides.

Are there any side effects?

The tracer that we inject will not produce any side effects. You can continue with your usual daily activities. In particular it will not make you drowsy and so will not prevent you from driving a car.

What happens after my Gallium DOTATATE PET/CT scan?

Once the scan is completed you will be able to leave the department immediately. You will be able to eat and drink as usual.

You may go anywhere you wish, but we ask you to avoid prolonged close contact with pregnant individuals and children for the rest of the day. This is to avoid exposing children to unnecessary radiation.

How will I get the results of my Gallium DOTATATE PET/CT scan?

Your PET/CT scan will be reported on by the nuclear medicine consultant within three working days of completion. The results of your test will then be made available to the doctor who referred you.

Important points

- Due to the nature of these investigations, we advise that you should not be accompanied by anyone who is pregnant and should not bring young children to the department. With most of these investigations, the level of radioactivity will have decreased to a safe level by the time you arrive home after the scan. However, some investigations need more specific restrictions with regards to contact with young children and we will explain these.
- If you are afraid of needles you can ask for a spray to numb the area, before your injection. Please call the Nuclear Medicine Department if you would like to request this.
- We are committed to ensuring patients are free from discrimination regardless of their gender or sexual orientation. If your gender was female at birth and you are transgender or non-binary, please inform a member of staff as we legally need to rule out the possibility of pregnancy before we can go ahead with some of our examinations. This information will not be recorded or shared without your consent.

- If you are pregnant or breastfeeding, please contact the department as soon as possible to find out if you can have this test. Generally, nuclear medicine tests are not carried out on pregnant individuals unless absolutely necessary and then the dose of radioactivity will probably be reduced.

Contact us

If you have any queries, please contact us:

Nuclear Medicine Department

Sutton 020 8661 37626 / 3287

Chelsea 020 7811 8541

Email rmh-tr.rmuclearmedicine@nhs.net

Alternatively, please call:

The Royal Marsden Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone: Chelsea 020 7811 8438 / 020 7808 2083

Sutton 020 8661 3759 / 3951

Email: patientcentre@rmh.nhs.uk

No conflicts of interest were declared in the production of this booklet.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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