

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 Ametop cream/spray. This is a local anaesthetic, which is placed on the skin half an hour before the injection. Please call the Nuclear Medicine Department if you would like to request this.
- 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 women unless absolutely necessary and then the dose of radioactivity will probably be reduced.

## Contact us

If you have any questions please contact us on:

### Nuclear Medicine Department

Sutton: 020 8661 3762/3287

Chelsea: 020 7811 8541

Alternatively, please call:

### The Royal Marsden Macmillan Hotline:

020 8915 6899

(available 24 hours a day, 7 days a week)

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

### References

This leaflet 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 leaflet are available on request from:

The Royal Marsden Help Centre

Freephone: 0800 783 7176

Email: [patientcentre@rmh.nhs.uk](mailto:patientcentre@rmh.nhs.uk)

No conflicts of interest were declared in the production of this leaflet

Published July 2018. Planned review July 2021

© The Royal Marsden NHS Foundation Trust NM-1720-01

Life demands excellence



Radiotherapy and  
Chemotherapy Services  
F538021 & F538022



The ROYAL MARSDEN  
NHS Foundation Trust

## Having a Gallium DOTATATE PET/CT Scan

### Nuclear Medicine

### Patient information

## 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?

The amount of radiation involved is small, and is similar to the amount used in some x-ray procedures. The benefits of the scan far outweigh any

possible risk from the radiation. Your referring doctor will have considered this carefully before asking us to carry out this examination. However, 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?

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 ask you to change into a hospital gown and remove all jewellery. We will then 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 30 minutes prior to your scan.

After 30 minutes, we will take you into the scanning room and onto the scanning bed. The scan will take approximately 20 to 90 minutes. You will be scanned with your arms raised above your head. Occasionally we may also scan you 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 women 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 24 hours 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