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Swansea Bay University  
Health Board

**SINGLETON HOSPITAL**

**NUCLEAR MEDICINE**

Your  
 **$^{18}\text{F}$ -FDG PET/CT Scan**  
Appointment

Please read this leaflet carefully and  
attend the PET-CT Reception  
(Radiology) for the appointment shown  
below

Name

**Appointment Details**

Date

Time

If you are unable to attend this appointment,  
or if you have any queries, please telephone  
**(01792) 517 965**

## A Guide to your <sup>18</sup>F-FDG PET/CT scan

Your referring specialist has decided that you should have a PET/CT scan as part of your care at this hospital. This is an extremely beneficial procedure as it provides a lot of very useful information that will help decide the type of treatment you may need.

This leaflet contains important information about the procedure, as well as some things that you will need to know and do beforehand. This will help us to ensure that everything runs smoothly for you and you get the best from your scan.

**Read this leaflet carefully and if there are any questions or concerns please telephone the department.**

### What is an <sup>18</sup>F-FDG PET/CT scan?

A PET/CT scan is made up of two scan types or 'imaging':

**PET** (Positron Emission Tomography) uses very small amounts of a radioactive sugar (<sup>18</sup>F-FDG) which, once injected into one of your veins, can be seen on the scan and show how parts of your body are functioning. **CT** (Computed Tomography) uses X-rays to produce images of the different density or thickness of organs in your body.

By combining these two images, a PET/CT scan can show how well certain parts of your body are working, as well as showing what they look like. You get a very detailed and accurate internal picture which a referring specialist can use to help diagnose and, if necessary, decide the most effective treatment.

PET/CT scans are particularly helpful for investigating confirmed cases of cancer, to see how far the cancer has spread and how well it is responding to treatment. PET/CT scans are sometimes used to help plan operations, such as brain surgery for epilepsy. They can also help diagnose some conditions that affect the normal workings of the brain, such as dementia.

- Take all regular medication as normal and bring a list of your medication with you to your appointment;
- Do not eat during the 6 hours before your scan, and drink only plain, unflavoured water. **Why?**

Food and sugar in flavoured drinks will interfere with the quality of your scan. Drinking plenty of tap water (roughly 4 to 5 glasses) will help to flush the injection we give you through your body.

## **Diabetics will be given separate fasting and medication instructions**

- Avoid strenuous activity and exercise for **24 hours** prior to your appointment. **Why?**

We need you to be as relaxed and rested as possible. Unnecessary radioactive uptake in active muscles will also reduce the quality of your scan.

- Make sure you keep yourself warm for **12 hours** before your scan, and bring some warm clothes to your appointment with you. **Why?**

If you are cold, there may be more uptake of the radioactive tracer in your muscles and other tissues. This could reduce the quality of your scan.

- If possible, wear loose fitting clothes without metal zips/fasteners and minimal jewellery. We will be able to provide suitable clothing, alternatively. **Why?**

You will need to remove any jewellery or metallic objects, as the presence of metals will create imaging problems. We can't guarantee the safety of valuables so you may want to leave them at home.

- If you are running late or are unable to attend, you must contact us **IMMEDIATELY**. Aim to arrive 15 minutes prior to your appointment. **Why?**

For the procedure, you will be given an injection, which is produced just for you and has a very short shelf life. If you are late, we may not be able to proceed with your scan.

**If you think you are going to be late, or don't think you can come please call us on 01792 517 965 as soon as possible.**

- You may bring a friend or relative, provided that they are **over 18** and **not pregnant**. However, they will have to remain in the waiting room during your appointment.
- If you are claustrophobic, please ask the hospital staff before the day of the scan about the possibility of having a mild sedative to help you relax. Sometimes your referring specialist may also decide to give you a sedative to get better results from your scan. This will be discussed with you prior to your appointment. You will be asked not to drive for 24 hours afterwards, as it may not be safe to do so.
- Expect to be in the department **for 2-3 hours**.

## What does the test involve?

- Following check-in at reception, you will be escorted to a private preparation area;
- You may be asked to change into a gown and remove jewellery or metallic objects;
- You will be asked a brief medical history and the procedure will be explained;
- Sometimes there will be staff in supervised clinical training present. Please tell us if you are not comfortable with this.
- A small needle will be inserted into a vein in your arm/hand. We will take a small blood sample to check that your blood glucose level is within the acceptable range. The radioactive sugar will then be injected;
- After the injection, you will need to rest and remain lying down comfortably for approximately 1 hour while the radioactive sugar is absorbed into your body. You will be asked to avoid talking while you wait because moving and speaking can affect where the radioactive tracer goes in your body;
- Immediately prior to your scan, you will be asked to empty your bladder;

- In the scanning room, you will be asked to lie on your back on the scanning bed with your arms supported above your head. In certain circumstances, we may scan you with your arms by your side;
- The bed will move through the ring of the scanner and collect images for between 15 to 60 minutes, depending on the type of scan that you need;
- It is very important that you keep still during the entire scan.

## Benefits, Risks and Side Effects

The main benefit of the test is making the correct diagnosis or allowing us to effectively monitor your treatment. Please remember that your referring specialist has decided that this scan is beneficial for you.

Nuclear Medicine procedures are among the safest of diagnostic imaging tests. The amount of radiation received during a PET/CT scan will have been approved by an imaging specialist and tailored specifically to you. The typical amount of radiation from the entire examination is about the same as you would receive naturally over seven years so the risks associated with it are considered to be low. Also, there have been no documented side effects associated with the radioactive tracer.

The scan will not be uncomfortable, apart from the pinprick of the injections. You will need to remain still while the pictures are taken but you will be placed as comfortably as possible.

## After the scan

Once the scan is complete and you have used the toilet, you are free to leave as soon as you feel ready. You may eat and drink immediately after the scan. **Drink 4-5 glasses of water** and empty your bladder frequently, to flush any excess tracer from your kidneys. This will lower the radiation dose to your bladder and pelvis.

We recommend that you stay away from **pregnant women and young children** for about **8 hours** while the radioactive tracer may still be in your system.

### When will I get my results?

You will not have the results on the day of your scan. Your scan will be analysed by our Consultant Radiologist and a report will be sent to the referring specialist who requested your scan within 1 week.

## Meet the PET/CT team

A mixed group of professionals from the **NHS** and from **Alliance Medical** will be involved in providing your scan.

A **Clinical Assistant**: may be on hand to assist the imaging staff during your scan.

A **Receptionist** will greet you on arrival and direct you to the waiting area.

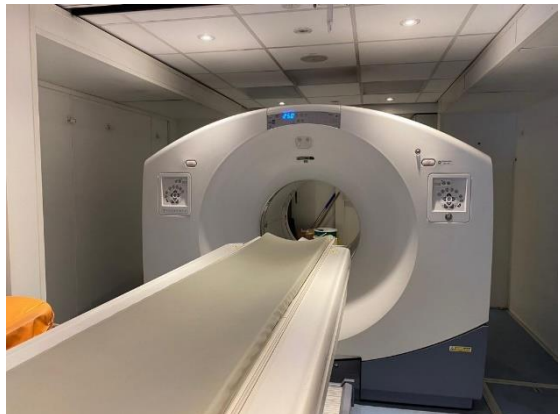
**Radiographers/ Technologists** will operate the equipment and administer the radioactive tracer. They are qualified technical specialists, highly trained in PET/CT imaging.



**Clinical Scientists** are qualified medical scientists, highly trained in ensuring the safety of all aspects of your scan.

A **Consultant Radiologist** is a specialist doctor who is highly trained and an expert in PET/CT who will report the results of your scan.

## The PET/CT Scanner



## Important instructions

1. If you are **pregnant**, trying to get pregnant or if you are **breast-feeding**, please contact the department.
2. If you are on **dialysis treatment**, please contact the department (unless you have already discussed this with us).
3. Please do not give **blood** or **urine samples** during the first **24 hours** following your PET/CT scan appointment.
4. Continue with any **medication** that has been prescribed for you.
5. **Do not eat** for 6 hours before your appointment.
6. Drink only **plain, unflavoured water**, for 6 hours before your appointment.
7. **Keep warm** for 12 hours before your appointment, and bring some warm clothes with you.
8. Arrive at the department **promptly** at the time and date given on the front of this leaflet.
9. Upon arrival, report to the **PET/CT reception desk**. A map of the hospital is shown on the back of this leaflet.
10. If you are given a sedative, you will be asked **not to drive for 24 hours** following your scan. Please make sure that you have planned how you will get home.

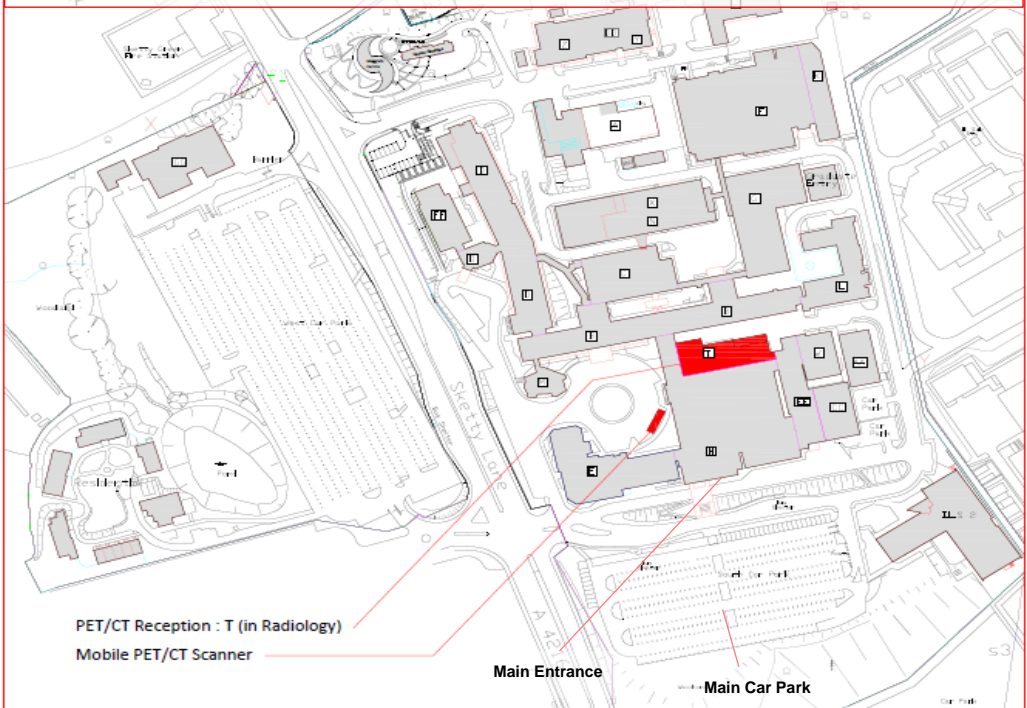
Please be aware that we can sometimes experience technical difficulties with the scanner or the injection (which is manufactured off-site). On these rare occasions, we will inform you as soon as possible and we will arrange a new appointment with you.

## Questions?

If you have any questions or concerns regarding your appointment, please contact us on **01792 517 965** or alternatively on **01792 285 295**.

## Arriving for your scan

Travel and parking instructions can be found in the map below. If you need assistance, please ask at PET/CT reception.



### Your Feedback:

You will be asked to complete a “Friends and Family” questionnaire following your scan. We want to provide the best care possible to all our patients so would very much like to hear from you about your experience – things that we did well, and areas where we could improve. If you have any concerns about your experience you can also speak directly with a member of the team.

You can provide your comments by:

1. Using the “Contact” section on our website:  
<https://petct-swansea.org.uk/>
2. Contacting our Patient Advice and Liaison Service (PALS) via telephone  
**01792 205666, extension 37517 or 37518**  
or via email [SBU.PALSTeamSingleton@wales.nhs.uk](mailto:SBU.PALSTeamSingleton@wales.nhs.uk)
3. Writing to: Monica Martins, Clinical Team Lead, Nuclear Medicine & PET-CT, Singleton Hospital, Sketty Lane, Swansea SA2 8QA.