

## PATIENT INFORMATION: FET PET Scan

Your doctor has requested that you have a FET PET brain scan. This is a non-invasive way to study protein metabolism in your body, and provides important information about the diagnosis, and restaging of brain tumours as well as other types of cancers. In particular, a FET scan can assist with detecting residual or recurrent tumours, as well as help localise the best site for biopsy and to guide some treatments such as radiotherapy. This type of scan is commonly used in conjunction with a FDG PET brain scan.

**PLEASE TURN OVER FOR IMPORTANT INFORMATION REGARDING YOUR SCAN**

### A Note on Pregnancy

If there is any chance that you may be pregnant, or if you are breast feeding, please notify staff **BEFORE** proceeding with the scan.

### Risks

A FET PET scan is a simple and safe test. It involves a small amount of radiation, similar to an ordinary body CT scan. Though clinical experience is more limited than with other types of PET scans such as FDG PET, the risk of allergic reaction would appear to be very low.

YOUR APPOINTMENT IS AT ..... ON ..... THE .....

PLEASE FAST FROM .....

### PREPARATION

#### Day Before:

- Confirm your booking by phone (9430 1100), and discuss any concerns you might have about claustrophobia etc.
- Arrange your transport.
- No strenuous exercise.

#### Day of the Test:

- No food at all for 6 hours prior to your appointment.
- No sweets, chewing gum, breath mints, soft drinks or sugar of any form.
- Keep warm.
- Avoid exercise.
- Don't wear anything with metal in it.



- Drink 3-4 cups of water on the morning of the test.
- Arrive 15 minutes before your appointment time.
- Please bring along all your old CT scans, MRI scans and X-rays.
- Please bring your pain relief medications with you, if needed.

**Directly following the Test:**

We do ask that you:

1. Keep yourself well hydrated for the next 8 hours. A substantial amount of the FET injection will pass out through your urine.
2. Keep your distance from pregnant woman or children.
3. If you are seeing your doctor or any other health professional immediately after your FET scan please notify them that you are still a source of radiation.
4. We ask that you do not schedule any other appointments for yourself for the rest of the day.

**What is a FET-PET Scan?**

Proper preparation is essential for a successful scan (please see page one for instructions). You are requested to arrive in the PET Suite 15 minutes prior to the booked time. The clerical officer will book you in, and ask you to sign a consent for release of information (this allows us to get previous scan results and other crucial information from your specialists). If you are wearing anything containing metal, e.g. underwire bra, metal zipper etc you may be asked to change into a gown. A doctor will then ask you about your medical history and will want to review the previous x-rays, CT scans, MRI scans etc that you have brought along. A cannula (fine plastic tube) will be inserted into a vein in your arm or hand, and you will be given the PET radio-isotope, called 18F-FET, through this cannula.

You will be asked to lie quietly on a couch for the next 30 minutes (called the uptake time). Then you may be asked to go to the toilet to empty your bladder, and then lie on the PET scanner bed. While you are on this scanning bed, it will move through the tunnel in the centre of the PET machine so that 3 dimensional pictures of your body can be taken. Even though this tunnel is 70cm wide i.e. wider than most MRI and CT machines, you may feel a little claustrophobic, but you will be able to talk to staff during this scan via an intercom in the machine itself. It takes about 20 minutes for the pictures to be completed. Please advise staff before your appointment if you are claustrophobic and think you might need a light sedative.

The total time for the test will be 1-2 hours.

After you have been told that you can leave the PET Suite, it is suggested that you go directly home. Your scan will be reported on the same day or early the next day, and the results will be sent to the referring doctor.



### Therapeutic Goods Administration Requirements

The FET product used in this scan has not been assessed by the TGA. Therefore, it can only be supplied by the manufacturer (Cyclotek Australia Pty Ltd, of Dandenong, Melbourne) under the Special Access Scheme (SAS). Cyclotek is a regular supplier of other PET tracers such as FDG, and complies with the code of Good Manufacturing Practice.

The SAS requires a written acknowledgement that the TGA has not been asked to assess this product, and that the product is therefore unregistered in Australia. This type of situation is not uncommon, particularly for relatively new agents, and those used in only limited circumstances.

PET facilities elsewhere through Australia including sites in Sydney and Melbourne are currently using FET scanning under the terms of the Special Access Scheme.

Potential risks include those related to radiation exposure from the test, as well as bruising, blood vessel wall damage and some discomfort at the cannula site. There have been no problems with allergic reactions in patients studied to date. Though the risk of allergic response to the injection appears small, there still may be some risk of an allergic reaction to the FET injection.

Patients who are pregnant and/or breastfeeding should not undergo this scan.

I have read this information sheet and indicate that:

- (I) I am aware that FET has not been registered or listed by the TGA.
- (II) I have read this information sheet concerning risks and acknowledge that I have been given the opportunity to ask questions about the procedure.
- (III) To the best of my knowledge, I am not currently pregnant, and I am not trying to conceive.

Patient Signed : \_\_\_\_\_ Name : \_\_\_\_\_ Date : \_\_\_\_\_

Witness Signed: \_\_\_\_\_ Name : \_\_\_\_\_ Date : \_\_\_\_\_

