

Positron Emission Tomography (PET) Computed Tomography (CT) Information

PREPARATION FOR PET/CT

- **Eat high-protein, avoid sugar and starch one day prior to exam:**
Protein: Fish, chicken, beef, pork, nuts, and eggs. **Starch:** Bread, potato, pasta or rice.
- **Drink plenty of plain water the day before and the day of the exam.**
- **Do NOT eat 6 hours before your exam.** Do not drink coffee, tea, juice or soda. Do not chew gum. You may take all medications other than fluid pills and diabetic medication. (You may bring your insulin with you to the office.)
- **Do NOT exercise day of exam.**
- **If claustrophobic or anxious, contact your referring doctor to prescribe Xanax or Valium.** If you are going to take the prescribed Xanax or Valium, you must bring someone to drive you home. Wait for instructions from our technician before taking prescribed medication.
- **Wear warm comfortable layered clothing.** No jewelry or metal buttons. You may be asked to remove hairpins, eyeglasses, hearing aids, and removable dental work.
- **Bring a friend or family member for emotional support.**
- **Allow 1 ½ to 2 hours for the exam.** PET/CT registration, preparation, and scanning time takes about an hour and a half. Waiting time can vary if waiting for results and/or consult with the physician.
- **Avoid contact with infants, children, and pregnant women for 24 hours after the exam.**

WHAT IS PET/CT SCAN?

PET (Positron Emission Tomography) measures the cellular metabolism of a simple sugar, deoxyglucose labeled with radioactive fluorine following intravenous injection. While you rest on a bed that moves through the open scanner ring, the PET/CT scanner records signals from these tracers as they journey through your body. A computer then assembles the signals into actual images. CT (computed tomography) is an X-ray examination that utilizes computers to show cross sections of body tissues and organs. The result is a detailed multidimensional view of the body's interior; however CT alone is unable to detect abnormal metabolic activity seen with PET. PET/CT combines PET and CT into a single quick and comfortable test.

We inject the radioactive glucose by a butterfly needle (sterile technique), which can take about 5-10 minutes and then the needle is removed. After the injection, the patient will rest in a quiet room for 45 minutes to allow the radioactive tracer to circulate throughout the body. The patient is asked to refrain from talking, reading, writing and chewing gum during this period. After 45 minutes, the patient is put on the table for the scan, which takes approximately 20-25 minutes. It is very important to stay still during the PET/CT exam. Movement can blur the PET/CT images or can cause the glucose tracer to be absorbed in your muscles and distort test results.

IS PET/CT SAFE?

Yes. PET/CT has been approved by the Food and Drug Administration. The level of radioactivity is small, and disappears quickly. To minimize any potential risk, PET/CT will not be performed on pregnant women. Women of childbearing age must not be pregnant when having PET/CT or CT exam. Nursing women should inform radiologist before having PET/CT. As an extra precaution, patients having a PET/CT are also asked to avoid contact with pregnant women, infants, and small children for a period of 24 hours after the procedure.

BENEFITS OF PET/CT

Evaluation for memory disorders

- Earlier and more accurate diagnosis of Alzheimer's disease and other dementias
- Allows earlier therapies to slow the loss of the patient's ability to function

Cancer Diagnosis, staging and treatment evaluation

- Earlier and more accurate diagnosis of cancer
- Accurate determination of how far cancer has spread (staging and restaging)
- Improved treatment planning
- Accurate monitoring of effectiveness of cancer treatment
- Elimination of patient discomfort and expense from unnecessary surgeries, invasive procedures, and uncomfortable tests

PET/CT is much more accurate than PET, CT, or MRI alone, but PET/CT cannot detect all cancers. For example, cancer smaller than 5 mm (or about ¼ inch) may not be seen with PET/CT.

Prostate, kidney, bladder, bronchoalveolar carcinoma, carcinoid tumor, and slow growing cancers are examples of tumors that may be missed with PET/CT. Also, some infections may be misinterpreted as cancer. **It is important to treat infection or inflammatory disease before PET/CT, to reduce false positive results.**

BLOOD SUGAR LEVEL

Since glucose labeled with a tracer is used for the test, PET/CT scan cannot be performed if your blood glucose level is too high. **Your test will be cancelled if your blood sugar level is above 150 mg/dl. Do not eat, chew gum, or drink beverages containing sugar, for at least 6 hours prior to your exam. If you are diabetic, please make sure your blood glucose is below this level on the day of your exam.** On day of exam, your blood glucose level will be checked beforehand, to make sure it is 150 mg/dl or below. **Patient is responsible for cancellation fee of \$250 if blood sugar level is too high to perform PET/CT.**

ARRIVE ON TIME

It is **extremely** important that you arrive on time. The glucose tracer used for the PET/CT scan is specially prepared for each patient and lasts only a few hours. **Patient is responsible for \$250 cancellation fee if patient arrives too late for test,** or appointment is not cancelled with 48-hour notice.

CHECK IN

Receptionist will give you forms to fill out and ask to copy your insurance card. When forms are completed, you will be escorted to the PET/CT mobile unit. Please have paperwork completed upon arrival if you have received paperwork before scheduled appointment.

AFTER EXAM

Check with receptionist for further instructions. Drink plenty of water to flush out any radioactive sugar left in your body. Remember to stay away from children and pregnant women for 24 hours.

INSURANCE

Insurance companies make final payment determination *after* charges are submitted. AWIC is unable to determine in advance how much your insurance will pay. Our staff will help you obtain payment from your insurance company. If insurance company refuses payment, the patient will assume full responsibility for all charges.

PATIENT CONSENT

PET/CT or CT

Your physician has recommended that you undergo the procedure checked below. You have the right to be informed of the risks, benefits, and nature of the procedure as follows:

- PET utilizes a small amount of a radioactive sugar injected into a patient's vein. This sugar accumulates in metabolically active cells, including tumors and sites of infection or inflammation.
- CT uses x-rays to display the body's anatomy. The patient is exposed to some radiation during this test. X-rays can harm a developing fetus, so be sure to tell your doctor before the exam if there is any chance that you may be pregnant.
- PET/CT combines these two tests into a single exam. PET/CT poses minimal health risk to the patient. Problem areas can be identified far more accurately than with PET, CT, MRI, or general X-ray alone.
- PET/CT cannot detect all cancers. Certain cancer types, and very small or slow growing cancers may not be seen. Please follow recommendations of your physician and the American Cancer Society for early cancer detection.
- Inflammation or infection detected by PET/CT may mimic cancer. This may lead to additional tests to confirm PET/CT findings.
- PET/CT of brain cannot determine the cause of all dementias and other neurological diseases.
- If insurance company refuses payment, the patient will assume full responsibility for all charges. If PET/CT is cancelled due to missed appointment, blood glucose over 150 mg/dl, or any other reason without 48 hour notice, the patient will pay a \$250 cancellation fee for radiopharmaceuticals and other expenses.

Acknowledgement: By signing this form, you agree that you have read and understood the information, have been verbally informed about the procedure, have had an opportunity to ask questions and have received all the information you desire concerning the procedure, understand the potential risk and benefits, and consent to and authorize the following procedure(s) to be performed.

- PET/CT PET/CT, Screening PET/CT, Brain
 CT (non-contrast) CT (non-contrast), Screening.

FOR MEDICARE PATIENTS ONLY

Are you currently admitted to a skilled nursing facility or rehabilitation center? __No __Yes

If yes, name and phone number of the facility. _____

Patient or Legal Representative Signature

Date

Witness Signature

Date