

# PET/CT

What is PET/CT?

PET is an acronym for Positron Emission Tomography, and PET/CT is the combination of two imaging techniques in one exam - a PET scan and a CT scan. The PET scan provides unique information about your body on a cellular level while a CT scan allows for an even closer look at your body on an anatomical level. Many patients and doctors feel the combined scan is simply easier, faster, more precise and more cost efficient. Overall, the PET/CT scan helps physicians better understand the extent and the exact location of disease which helps develop accurate treatment plans for patients.

PET/CT can reveal diseased states before structural damage is evident, making the early detection of certain diseases possible.



# WEB SITES

For additional information, please visit the following web sites:

- [www.medx-ray.com](http://www.medx-ray.com)
- [www.cti-pet.com](http://www.cti-pet.com)
- [www.petscan.org](http://www.petscan.org)
- [www.hcfa.gov](http://www.hcfa.gov)



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# PREPARATION

## Patient Preparation

- It is important to provide recent x-ray studies (such as CT or MRI scans) for the interpreting physician to compare them directly to your PET/CT scan.
- Do not eat or drink, except plain water, for 4-6 hours before the scan, i.e., no gum, mints, coffee, etc.
- You may take any necessary medications that can be tolerated on an empty stomach except for cough medicine and medications that contain sugar.
- Diabetic patients will need to watch their diet closely the day before exam. Check blood sugar level frequently and try to keep below 150.
- No vigorous exercise 72 hours prior to appointment.
- Allow 2-3 hours for the PET/CT procedure. Actual scan time will be one hour or 1.5 hours if history of melanoma.
- A physician will need to provide the patient with a prescription if claustrophobic.

To ensure the most accurate interpretation, the following guidelines are suggested for oncology patients:

- Schedule scan 12 weeks after last radiation treatment.
- Schedule scan 6-8 weeks after last course of chemotherapy.
- Schedule scan 6-8 weeks following surgery.

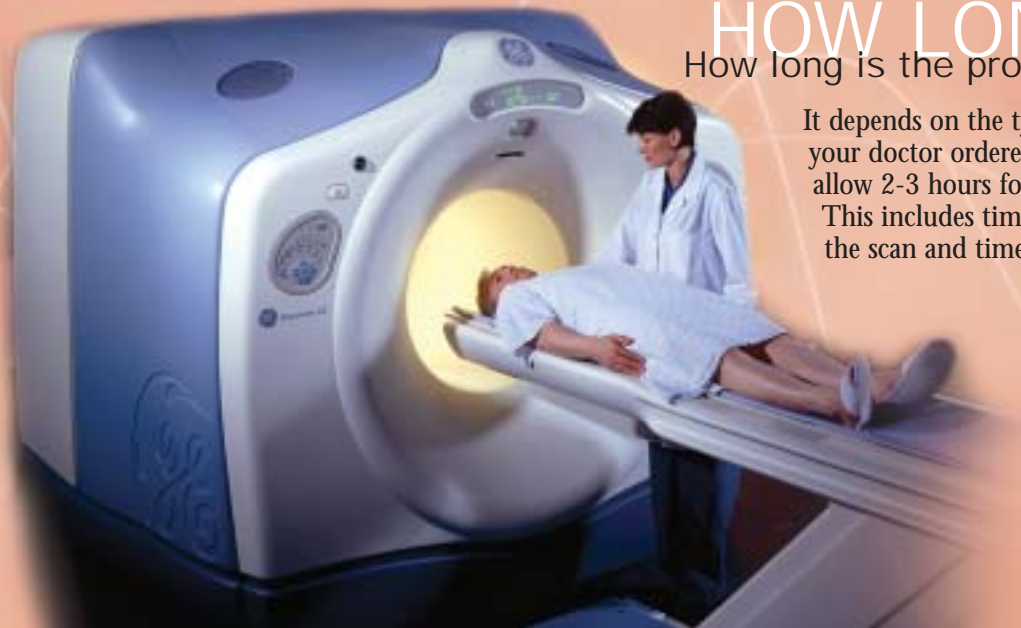
Progressive.  
TECHNOLOGY  
Precise.  
CARE  
Personal.



## WHY HAVE A SCAN

Why might my physician refer me for a PET/CT scan?

PET/CT scans are particularly useful in diagnosing many types of cancer (e.g. lung, colon, breast, skin), coronary heart disease, and many types of neurological problems such as epilepsy and Alzheimer's disease. For children, PET/CT is powerful for diagnosing brain tumors, lymphoma and other cancers as well as epilepsy. PET/CT is quickly becoming a leading diagnostic tool for many types of cancer.



## HOW LONG

How long is the procedure?

It depends on the type of PET/CT scan your doctor ordered. In general please allow 2-3 hours for the entire visit. This includes time to prepare you for the scan and time in the scanner.

## ARRIVAL

What happens when I arrive for my scan?

Upon arrival for your appointment, you will complete a brief questionnaire about your medical history. A technologist will then escort you to the imaging area and explain the procedure. After that, the technologist will administer a very small amount of radioactive glucose that is needed to detect abnormalities. Following the injection, you will rest in a private room while the glucose distributes throughout your body. The scanning procedure is performed while you lie comfortably on the scanner bed. The technologist will accompany you out of the imaging area at the end of your scan.

## FAMILY & FRIENDS

What about family or friends accompanying me?

- People who are not patients are unable to wait in the injection rooms or scan room due to radioactive exposure.
- Please make arrangements for childcare. We cannot be responsible for children left unattended.
- Family/friends are welcome to remain in the waiting area or come back when the patient's PET/CT scan is completed.



## DRIVING

Will someone need to drive me?

If your doctor gives you medication to reduce anxiety during the exam, you will not be able to drive yourself home.

## CLAUSTROPHOBIA

What if I am claustrophobic?

If you have had difficulty with MRI scans and feel this may cause anxiety, please ask your physician to advise you. In addition, you may have a family member or friend accompany you to the center.

## SIDE EFFECTS

Are there risks associated with a PET/CT scan?

A PET/CT study is similar to many other diagnostic procedures. Although the radiation you receive is different, it's roughly equivalent to what you'd receive from other diagnostic imaging exams.

Radiopharmaceuticals used in PET/CT don't remain in your system long, so there's no reason to avoid interacting with other people once you leave. To be extra safe, wait for a few hours before getting too close to an infant, or anyone who's pregnant.

Please consult your physician with any additional questions or concerns.