

# PET/CT

## *What is PET/CT?*

PET/CT is a state-of-the-art imaging technique that combines Positron Emission Tomography (PET) with Computed Tomography (CT) to image tissue and organ function. Our GE scanner is the most advanced and accurate PET/CT scanner available anywhere. This scan is designed to accurately identify even small areas of abnormal metabolic activity, which are associated with several disease processes. PET/CT's major clinical impact to date is in cancer diagnosis and staging; however, PET/CT is also a useful modality for imaging the heart and brain. PET/CT can show more than just where tumors are located. PET/CT can reveal whether lesions are benign or malignant and can assess the effectiveness of treatment, whether surgery, chemotherapy, or radiation therapy.

When you arrive at Princeton Radiology's Nuclear Imaging Suite, a technologist will discuss the PET/CT procedure with you and ask if you have any questions. When you are ready for your PET/CT scan, you will have your blood sugar tested. Next, most patients will receive an oral contrast (barium drink). An IV will then be started, and you will receive an injection of a small amount of safe, radioactive sugar. You will not experience any side effects from this material. You will then be asked to wait very quietly in a seated area. Any activity, even talking or gum chewing, may affect the results of your test. Prior to the scan, you will be asked to empty your bladder.

You will lie on a bed that passes slowly through the scanner. For scanning purposes, it is important that you lie quietly and remain still on the bed during your scan. The length of time between scans can vary depending on the body areas being studied, typically between 30 to 60 minutes. You should plan to spend approximately three hours total time at the Nuclear Imaging Suite for the entire PET/CT procedure.

## Exam Preparation

### *How to prepare for your PET/CT exam*

- Refrain from eating for at least six hours prior to your exam since the results of your test are affected by your blood sugar level.
- It is important to be well hydrated for your test, so please drink plenty of water beginning the day before your exam up to your appointment time.
- If you require pain medication or relaxants to stay still during the scan, please notify our staff at the time of scheduling your PET/CT scan and bring the medication with you.
- Do not perform any heavy lifting or exercising the day before or the day of your PET/CT scan.
- If you are diabetic, please notify our staff so that we may administer special instructions to you as necessary prior to your PET/CT scan.
- It is also recommended that you wear comfortable clothing.
- We will question you regarding any medical history that may pertain to your procedure. As such, please inform us of any prior imaging tests that you may have had, such as CT or MRI, so that we may obtain and review your previous images in combination with your PET/CT scan.



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