

What do I need to know about PET/CT?

A patient's information guide

What is PET/CT?

PET (Positron Emission Tomography) and CT (Computed Tomography) are both standard imaging tools that physicians use to pinpoint disease states in the body. The PET scan demonstrates the biological function of the body often before anatomical changes take place, while the CT scan provides information about the body's anatomy such as size, shape and location. By combining these two technologies, physicians can more accurately diagnose and identify cancer, heart disease and brain disorders.

Why do I need PET/CT?

PET/CT is a powerful imaging technique that holds great promise in the diagnosis and treatment of many diseases, particularly cancer. A non-invasive test, PET/CT accurately images metabolic and anatomic information in the human body in a single scan. This allows your physician to examine your entire body at once. PET/CT provides a more complete picture, making it easier for your doctor to diagnose problems, determine the extent of disease, prescribe treatment, and track progress.

About the scan

You will receive an intravenous injection of a radioactive tracer and will rest quietly for approximately 30 - 45 minutes while the tracer is distributed throughout your body. You will then be asked to lie on a table that passes slowly through the scanner. The CT portion of the test sends x-rays through the body that are processed to show the body structure. The PET portion of the test produces a whole body map of the tracer distribution. The scanning process takes less than 30 minutes.

Preparing for your scan

- Do not eat or drink anything except water for 4-6 hours before your test
- Wear comfortable clothing
- Take any prescribed medication unless instructed otherwise
- Notify your physician if you are pregnant, breast feeding or are diabetic.

Common Uses of PET/CT

Oncology

- Determine benign from malignant tumors in suspicious areas
- Survey the whole body for cancer that may have spread
- Monitor success of therapy
- Detect recurrent tumors
- Assess tumor aggressiveness

Cardiology

- Determine what heart tissue is still alive following a suspected heart attack
- Predict success of angioplasty (balloon) or bypass surgery

Neurology

- Dementia – detect signs indicative of Alzheimer’s and other dementia
- Epilepsy - determine the precise location for surgery
- Parkinson’s – assist physicians in the diagnosis of movement disorders

