

One Machine, Two Technologies



Combining two kinds of scans makes PET-CT a powerful diagnostic tool. It can pinpoint a tumor's location, determine whether the cancer has spread, and measure how active the cancer is.

What Is PET-CT?

Combining the images of a positron emission tomography (PET) scan and a computed tomography (CT) scan, a PET-CT scan is a powerful diagnostic tool.

The CT scan provides detailed anatomical pictures of tissues and organs inside the body, while the PET scan reveals abnormally functioning tissues that can indicate cancer.

How PET-CT Works

For a PET scan, glucose labeled with mildly radioactive tracers is injected into the patient. Cancerous tissue tends to attract this substance, which emits gamma rays that will be detected by the scanner. The PET scanner records these gamma rays from the various organs targeted for the exam.

In the CT portion of the procedure, a computer reassembles the signals into three-dimensional pictures of the body. These detailed, cross-sectional images show any abnormalities or tumors.

Combining these two kinds of scans creates a more complete image than either test alone. It can pinpoint a tumor's location, determine whether the cancer has spread, and measure how active the cancer is.

PET-CT testing at Olympic Medical Cancer Center is conducted with a mobile scanner mounted on a trailer. The mobile unit delivers the benefits of advanced technology with the convenience of close-to-home accessibility.

Preparing for Your PET-CT Exam

Do not eat or drink anything for six hours before the scan. This fasting will lower the overall sugar level in your body, making the glucose injection more visible.

You'll need to be relaxed for the exam. So wear loose-fitting clothes and avoid caffeine. If you are diabetic, you will receive special instructions from your doctor.

What to Expect

You will receive the glucose injection about 45-60 minutes before the scan. Then you will lie on a table that glides through the scanner's circular opening.

During the scan, just relax and lie still. Some patients even fall asleep during the scan.