

A smiling male healthcare professional with glasses, wearing blue scrubs, is attending to a patient. The patient is lying down, and the healthcare professional is leaning over them, looking down with a friendly expression. The background is a clinical setting with white walls and equipment.

PHILIPS

Ingenuity TF PET/CT

Comfort and quality care in one

Your PET/CT scan with Philips
Ingenuity TF PET/CT

What's a **PET/CT scan**, and

A PET/CT scan provides your doctor and medical specialists with valuable information about your health and possible courses of action when it comes to treatment.

Two scans in one procedure

PET shows metabolic function in the body. A computer designed especially for PET scans records this information and converts it into pictures for diagnostic purposes. CT creates a picture of your body's anatomy, allowing your doctor to view the size, shape, and location of lesions. The "what" and "where" information from both scans is combined into a single 3D image.

Gathering information through radiation

For PET scans, a small amount of a radiopharmaceutical is infused into your bloodstream. It provides imaging



d why do I need one?

information when it's absorbed or concentrated in body tissue. For CT scans, you'll also receive a contrast agent by mouth or IV injection. You'll be exposed to radiation, but it's important to note that every day, we're all exposed to a certain amount of naturally occurring background radiation. Results will depend on your situation, but many PET/CT scans are roughly equivalent to a few years natural background radiation.

The many uses of PET/CT

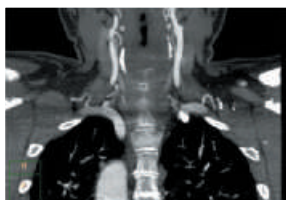
PET/CT scans are most often used in oncology (cancer), cardiology (heart disease), and neurology (disorders of the nervous system). Your doctors may schedule one to:

- see if your cancer has spread
- show areas of poor blood flow to your heart
- check your brain function
- monitor any cancer recurrences
- track your response to your treatment over time

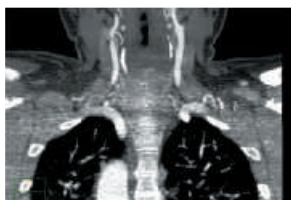


How much **radiation** will I be exposed to?

Radiation exposure during PET/CT scans is unavoidable. Even though the amounts are small, it's understandable you're concerned about higher levels of radiation from multiple scans. Ingenuity TF PET/CT is designed with iDose⁴ to allow your doctor to manage dose without sacrificing image quality.



iDose⁴ on



iDose⁴ off

Low doses, high-quality images

Your CT dose allows the scanner to detect your organs and tissues as well as lesions and other abnormalities. In years past, a low CT dose often would not provide enough signals for the scanner to gather quality information. Doctors frequently had to choose between giving a low CT dose and getting a superb image.

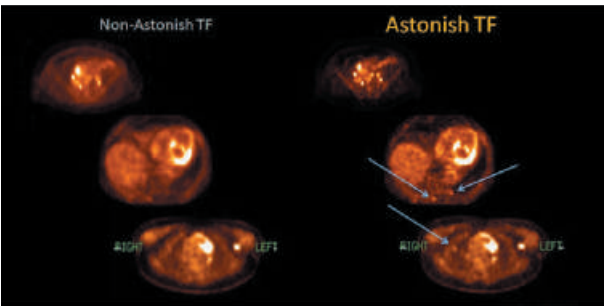
Thanks to iDose⁴, your doctor doesn't have to make a trade-off in image quality. It uses a complex algorithm to manage how the signals are processed and arranged into an image.

What will my doctor **see**?

Ingenuity TF PET/CT uses excellent contrast and image resolution to help make details like small lesions visible.

See the details that matter

Ingenuity TF PET/CT uses technology called “time-of-flight” to measure how your radioactive injected drug is interacting with your body. As the drug begins to decay, it emits particles known as positrons. Each positron collides with an electron to form a pair of photons that travel or “fly” away from one another. With the time-of-flight method, the scanner records when exactly each photon was detected. The system then calculates the difference in time to help delineate the lesion. When the PET/CT image is reconstructed, this technique enhances the contrast and resolution of your doctor’s image.



What kind of scanner will be used, and is it **patient-friendly**?

Your PET/CT scan will be performed using a Philips Ingenuity TF PET/CT scanning system. It's designed to make your scan as pleasant, smooth, and fast – without sacrificing the excellent image quality your doctor needs.



Comfortable from start to finish

If you've had a PET/CT scan before, you might have noticed that you had to switch beds before actually moving into the scanner. With our system, you get onto and off the bed just once.

Sometimes patients experience claustrophobia when they're in a scanner. If this happens to you, tell the operator. He or she can quickly and easily separate the PET and CT parts of the system by 60cm so you won't feel confined.

You can also expect a fast scan. On average, complete scans with Ingenuity TF PET/CT take around 15 minutes. In many cases, that's less than the time your mobile phone needs to recharge. The system also automates many routine procedures for operators, so they won't have to spend a long time adjusting the settings for you. And you spend less time on the table.



Talk to your doctor

At Philips, we believe people should be healthy, live well and enjoy life. Everything we do is driven by patient-centered care.

Ingenuity TF PET/CT was designed with your health and comfort in mind. If you have questions or concerns about this system, or your PET/CT scan in general, talk to your doctor today. He or she can explain the procedure and how it supports your treatment.



www.philips.com/healthcare

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