

PET/CT Ga-68 Dotatate Mid-body Study

How to prepare and what to expect

A Ga-68 dotatate NETSPOT PET/CT study is done to diagnose tumors. This handout explains how to prepare for the study, how it works, what you may feel during the study, and how to get your results.

What is a Ga-68 dotatate NETSPOT PET/CT study?

This study is done to diagnose *neuroendocrine* tumors, which involve both the nervous system and the endocrine glands. For the study, we will inject a radioactive substance called a *tracer* into your vein. The tracer used for this study is called *Ga-68 dotatate*.

After the tracer is injected, it is taken up by *somatostatin receptors* in your body. Some types of tumors have a lot of somatostatin receptors. These tumors include *carcinoid* tumors (malignant tumors, usually in the digestive tract), multiple *myelomas* (tumors in the bone marrow), and endocrine tumors (tumors in the glands).

One hour after you receive the injection, a special camera is used to take images of your body. The camera does 2 types of scans:

- A *positron emission tomography* (PET) scan shows where the tracer has collected in your body.
- A *computed tomography* (CT) scan provides pictures of your body's structures.



A PET/CT camera

Together, the PET and CT scans help your doctor see changes in your cells.

Scheduling Your Study

If your therapy involves **octreotide, pasireotide, or lanreotide injections**, follow these instructions when planning for your study:

- **Sandostatin (octreotide):** This drug is given every day. Do **not** take this drug for 24 hours before your Ga-68 study. Talk with the doctor who prescribed this drug. Find out if it is OK to pause your medicine for this study.
- **Sandostatin LAR (octreotide):** This drug is given every 4 weeks. Schedule your Ga-68 study for 1 to 2 days before your next injection.
- **Signifor (pasireotide):** This drug is given 2 times a day. Talk with the doctor who prescribed this drug. Find out if it is OK to pause your medicine for this study. Then call Nuclear Medicine Scheduling at 206.598.4240 to find out when to schedule your Ga-68 study.
- **Signifor LAR (pasireotide):** This drug is given every 4 weeks. Schedule your Ga-68 study for 1 to 2 days before your next injection.
- **Somatuline Depot (lanreotide):** This drug is given every 4 weeks. Schedule your Ga-68 study for 1 to 2 days before your next injection.

What should I expect when I arrive for the study?

A nuclear medicine technologist, a nurse, or both, will help you get ready for the study.

- We will insert an *intravenous* (IV) tube into a vein in your arm or hand.
- The technologist will inject the tracer into your IV.
- You will relax for about 45 minutes while the tracer flows through your body.
- We will then take you to the PET/CT scan area.
- We will ask you to lie on your back, with your arms above your head, on the scanner table.
- The PET/CT camera will take images.
 - Most scans cover from the base of your skull down to the middle of your thighs. This imaging takes about 25 minutes.
 - If your doctor has asked for a whole-body scan (from the top of your head to your toes), imaging will take about 60 minutes.

- Expect to be in the Imaging Department for 2 ½ to 3 hours for your entire PET/CT scan.

What will I feel during the scan?

- During the PET/CT scan, you must hold very still and breathe normally.
- You may feel some discomfort when the IV line is placed.
- You must lie flat on your back with your arms over your head for up to 25 minutes. We will use pillows to help provide support.
- Your body will be inside the camera during the scan, but most of the time your head will not be enclosed. If you have a strong fear of enclosed places or concerns about pain, talk with your doctor about *sedation* (medicine to help you relax).
- Most patients do not feel anything from the tracer.

What happens after the scan?

After the scan, drink plenty of fluids. This helps flush the tracer out of your system. The radioactivity is gone within a day.

Who reads the scan and how will I get the results?

A radiologist or nuclear medicine doctor will read your scan, and will also review past scans you may have brought with you. Your own provider will give you your scan results. Your provider should receive the results from the radiologist or nuclear medicine doctor within 3 days.

You may also read your results on your eCare Results page. If you need copies of your images on disc, call 206.598.6206.

You and your provider will decide the next step, such as treatment for a problem, as needed.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

UWMC Imaging Services:
206.598.6200

Harborview Radiology:
206.744.3105