

Octreotide Study

How to prepare

An octreotide study is a diagnostic nuclear medicine procedure. This handout explains how to prepare for the study, how it works, how it is done, what you may feel during the study, and how to get your results.

What is an octreotide study?

An octreotide study is done to diagnose tumors. It involves injecting a radioactive substance called a *tracer* into your vein. The tracer used for this study is called *Indium-111 octreotide*.

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

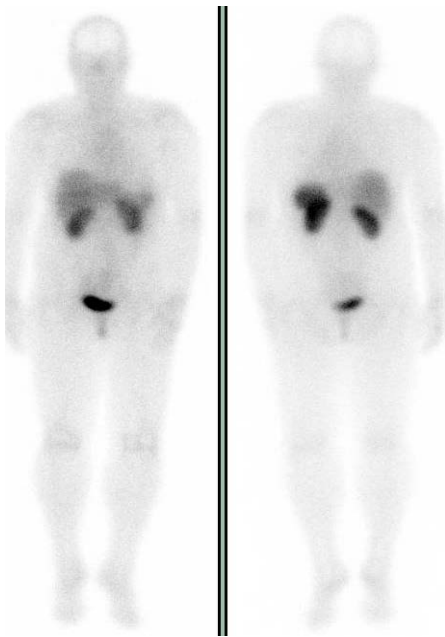
Next, a SPECT/CT gamma camera will be used to take images of your body. This is done 4 hours, 24 hours, and sometimes 48 hours after you receive the injection. The images show where the radiotracer was taken up. This allows your doctor to see the size and location of any tumors.



A SPECT/CT gamma camera is used to take images of your body in the octreotide study.

How do I prepare?

- **Drink plenty of fluids** throughout this study.
- **Take a mild laxative** the night before the injection and each night before imaging is done.
- If your therapy involves **octreotide, pasireotide, or lanreotide injections**, you **may** need to pause taking your medicine before your octreotide study. Follow the instructions under “Scheduling Your Study” on page 2.



This is an example of images taken of a patient during an octreotide study. The dark places show where the tracer was taken up.

Scheduling Your Study

Follow these instructions when planning for your study:

- **Sandostatin (octreotide):** This drug is given every day. You must 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.

How is the study done?

- When you arrive, the technologist will review the procedure with you and tell your attending doctor that you are in the clinic.
- You will have an *intravenous* (IV) line placed in your arm. The tracer will be injected. The technologist will then remove the IV. After that, you may leave.

For Insulinoma Patients

- Your blood sugar level will be checked before the study begins.
- You will receive a sugar solution just before and while the tracer is given. This will help avoid a *hypoglycemic* (low blood sugar) reaction.

4 Hours Later

You will return about 4 hours later for images to be taken of your body. You will be scanned from head to toe. You must hold very still.

The imaging takes about 1 to 3 hours, depending on what images your doctor needs. The SPECT/CT gamma camera is very quiet.

Your doctor may also ask for 3-D images to be taken, along with a low-dose CT scan.

24 Hours Later

You will return the next day (about 24 hours later) for more imaging. This session will last about 1 to 3 hours, depending on what images your doctor needs.

48 Hours Later

We **may** ask you to return for 1 more imaging session about 48 hours after we give you the injection. This session will last about 1 to 3 hours, depending on what images your doctor needs.

What will I feel during the study?

- Most people feel normal during this study.
- Insulinoma patients may have a drop in blood sugar.

Who interprets the results and how do I get them?

When the test is over, the nuclear medicine doctor will review your images, prepare a written report, and talk with your provider about the results.

Your provider will then talk with you about the results and your treatment options. Ask your provider if you need to restart any medicines that you stopped for this study. You and your provider will decide the next step, such as treatment for a problem, as needed.

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

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