Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

About Your Lutathera® Treatment

This information will help you get ready for your Lutathera treatment at MSK. Lutathera is a type of peptide receptor radionuclide therapy (PRRT).

About Lutathera

Lutathera is a medication used to treat neuroendocrine tumors. It can help make the tumors grow more slowly or stop them from growing. It can also help manage symptoms caused by the tumors.

Lutathera is a radioactive targeted therapy. It has 2 main parts: a tumor-targeted and a radioactive part.

- The tumor-targeted part helps the medication fight just the tumor cells, not your normal cells. This helps keep the medication from damaging healthy parts of your body.
- The radioactive part uses radiation (waves of energy) to damage and kill the tumor cells.

Lutathera is given as an intravenous (IV) infusion. An infusion is when medication is put into your bloodstream through a vein over a period of time.

Planning Your Lutathera Treatment

Before you get Lutathera, you'll have a video consultation or an in person appointment. You will speak with a healthcare provider from the Molecular Imaging and Therapy Service (MITS). This is sometimes called the Nuclear

Medicine service. You may need to have a blood test before your appointment. If you do, a MITS staff member will give you more information.

During your appointment, your MITS provider will ask you about your medical history. They will also talk with you about the goals of Lutathera treatment. The healthcare provider will use your medical history and the results of the blood test to see if Lutathera is right for you.

Your healthcare provider will ask you about your medications. Make sure they know all the medications you're taking. Medications include patches, creams, prescription medications, and over-the-counter (not prescription) medications. You may need to stop taking some of them before your treatment.

If you and your MITS healthcare provider decide that you will have Lutathera treatment, your MITS healthcare provider will review the side effects with you and let you know what to expect. They will also give you information about your Lutathera treatment schedule.

Lutathera treatment schedule

Lutathera treatment is given as 4 separate infusions. The infusions are given 8 weeks apart. You will come to the main hospital at MSK for each of your infusions.

Starting after your first Lutathera infusion, you will have blood tests monitored between treatments and for 2 months after your final PRRT. This is to make sure that your blood cell counts (the amounts of the different types of cells in your blood) stay at their usual levels during your treatment. You can have these blood tests done at the MSK location closest to you. The timeline below shows your Lutathera treatment schedule.

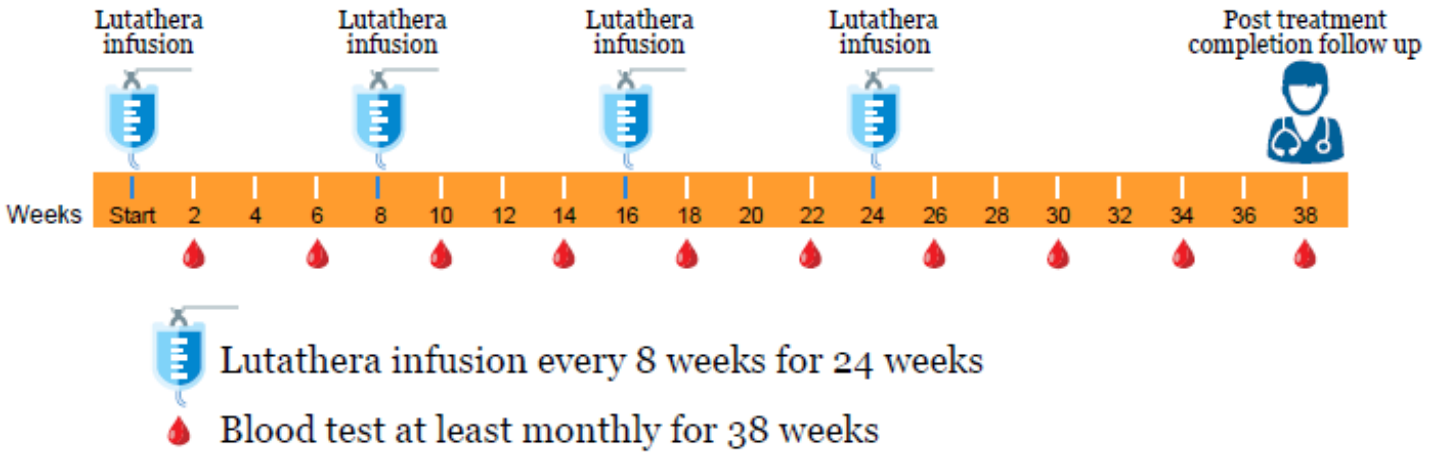


Figure 1. Lutathera treatment schedule

Octreotide Injections During Lutathera Treatment

You may be getting octreotide injections (shots) as part of your cancer treatment. If you get an octreotide injection too close before your Lutathera infusion, it can make the treatment less effective. Your healthcare provider will give you more information.

- If you take long-acting octreotide, don’t take it for 4 weeks before each Lutathera infusion. You will visit your medical oncologist (cancer doctor) to get an injection of long-acting octreotide after each infusion.
- If you take short-acting octreotide (also called immediate-release octreotide), you can keep taking it during your Lutathera treatment. **Do not use short-acting octreotide for 24 hours before each Lutathera infusion, unless your healthcare provider gives you other instructions.**

About Your Lutathera Infusion Appointments

Your appointment will take most of the day, please do not schedule other appointments on treatment days. You will arrive in the morning and be done by mid to late afternoon. Bring your appointment calendar with you to each treatment to schedule your next cycle and future lab appointments. You may

want to bring a book, laptop, or other things to entertain yourself during your appointment. You can also bring food and a drink.

Where to go

Your Lutathera infusion appointments will be in the MITS therapy suite. To get to the MITS therapy suite, enter the hospital through the entrance at 1250 First Avenue (between East 67th Street and East 68th Street). Turn left at the security desk in the lobby. Go up the stairs to check in at the reception desk . You can wait in the waiting area. A staff member will come and bring you to the MITS therapy suite.

What to expect

In the MITS therapy suite, you will sit in a private room with a TV and WiFi. A nurse will measure your vital signs (pulse, temperature, breathing, and blood pressure). They will also place 2 IV lines in your veins.

- If you have a central venous catheter (CVC), such as an implanted port (Mediport®), tunneled chest catheter, or peripherally inserted central catheter (PICC), they will place 1 IV line into your CVC and 1 IV line in a vein in your arm or hand.
- If you don’t have a CVC, they will place 1 IV line into each of your arms or hands.

Medications

You will get a few different medications during your infusion appointments.

- First, you will get anti-nausea medications. These are medications to keep you from vomiting (throwing up) or feeling nauseous (like you’re going to throw up).
- After the anti-nausea medications, the nurse will connect an amino acid hydration solution to one of your IV lines. This is a medication to protect your kidneys from the Lutathera. It will be infused (put into your bloodstream) slowly over 4 hours.
- About 30 minutes after the nurse starts the amino acid infusion, a healthcare provider will connect the Lutathera to your other IV line. It will be infused over 45 minutes.

During and after the medication infusions, you may have:

- Hair thinning
- Nausea
- Vomiting
- Pain or discomfort in your abdomen (belly)

A nurse will stay with you during your entire treatment to help with these symptoms if they happen.

Visitors can come with you to your Lutathera appointment. They must leave once the infusion is ready to begin. They can wait in the waiting room downstairs or leave the hospital. They can return once your appointment is over.

Nuclear medicine scan

After the amino acid infusion is finished, you'll have a short nuclear medicine scan to check where the Lutathera went in your body. You will be lying down during the scan. It will take about 10 minutes.

The timeline below shows what to expect during each of your Lutathera infusion appointments.

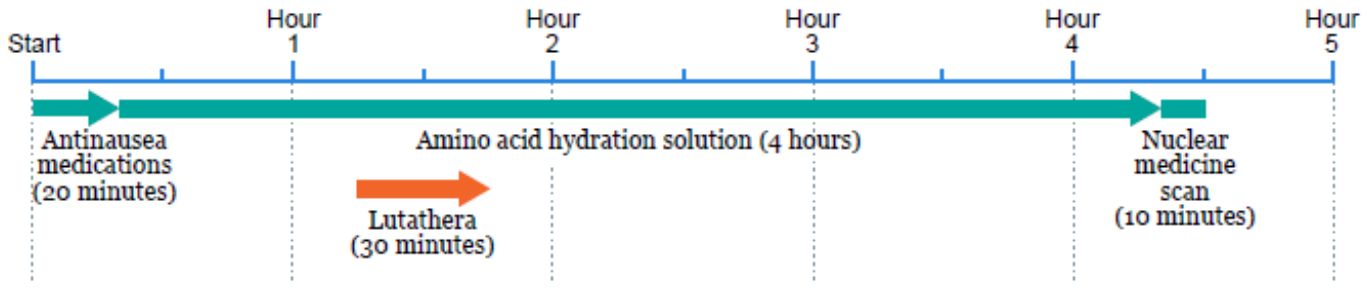


Figure 2. Lutathera appointment timeline

Radiation safety precautions

After your Lutathera infusion, there will be radiation coming from your body. A radiation safety officer (staff member who specializes in radiation safety) will talk with you about your radiation safety precautions before you

leave your injection appointment. They will also give you written instructions to follow at home.

Follow the radiation safety precautions below, as well as the instructions the radiation safety officer gives you, to keep from exposing other people to radiation.

- Do not use public transportation (such as a bus or train) to get home from your infusion appointment. If you do need to take public transportation soon after treatment, contact radiation safety for more details. It’s okay to use a car service. If you are driving with another person in the car, sit as far away from them as possible. You should also do this if you are using a car service.
- Avoid being in close physical contact with other people for a long period of time. It’s fine to be in close contact with another person for a short period of time (such as a brief hug). You should stay at least 3 feet (about an arm’s length) away from other people most of the time.
- Practice good hygiene, such as washing your hands well with soap and water after using the bathroom. Some of the Lutathera will leave your body through your blood, urine (pee), and other fluids.

How many days you must follow these precautions is based on your specific Lutathera treatment. It can range from 2 to 11 days. In general, you will be asked to:

- Stay 3 feet away from others the first few days after treatment.
- Sleep alone for about 1 week.
- Avoid holding or sleeping with small children or pregnant people for about 9 to 11 days.

Some types of security equipment (such as at the airport or outside a tunnel) can detect very small amounts of radiation. A staff member will give you a card that says you received radioactive medicine and that you may give off small amounts of radioactivity for up to 2 months after your treatment. If you’re stopped by law enforcement at a checkpoint, show them

this card.

If you have any questions about radiation safety, call 212-639-7391 Monday through Friday from 9:00 am to 5:00 pm.

After Your Lutathera Infusion Appointments

- Follow the radiation safety instructions that the radiation safety officer gave you.
- Drink lots of liquids after each infusion. This will help the radiation from the Lutathera leave your body more quickly. It’s especially important to follow the radiation safety instructions to clean or flush your bodily fluids (such as urine) in the bathroom.
- If you need to give blood, urine, or stool (poop) samples during the first 10 days after a Lutathera infusion, tell the staff member helping with the collection that you have been treated with radioactive Lutetium -177. The samples you give might be slightly radioactive. The staff member should take universal precautions. They don’t need to take any extra precautions.
- If you need medical care (such as an operation or hospital admission) during the first month after a Lutathera injection, tell one of the medical providers that you have been treated with radioactive Lutetium-177. Your body may still have traces of the radioactive material. The medical providers should take standard universal precautions. They do not need to take any extra precautions.

Octreotide injection

If you take long-acting octreotide injections, you will see your medical oncologist to get a long-acting octreotide injection after each of your infusion appointments.

During your Lutathera treatment (from your first infusion until 6 months after your last infusion):



- **Always use birth control during sexual activity.**
- **Do not become pregnant.**
- **Do not get a person pregnant.**
- **Do not breastfeed.**

If you have questions, talk with your MITS healthcare provider.

Contact Information

If you have any questions or concerns, please call the Molecular Imaging and Therapy Service.

- Monday through Friday from 9:00 a.m. to 5:00 p.m., call 212-639-3146. Ask for the Molecular Imaging and Therapy Service nurse.
- After 5:00 p.m., during the weekend, and on holidays, call 212-639-2000. Ask for the Molecular Imaging and Therapy Service fellow on call.

For more resources, visit www.mskcc.org/pe to search our virtual library.

About Your Lutathera® Treatment - Last updated on September 28, 2022
All rights owned and reserved by Memorial Sloan Kettering Cancer Center