



## PATIENT & CAREGIVER EDUCATION

# About Your Lutathera<sup>®</sup> Treatment

This information will help you get ready for your Lutathera treatment at Memorial Sloan Kettering (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. This means that it has 2 main parts: a radioactive part and a tumor-targeted 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 will have an appointment with a doctor in 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 doctor will ask you about your medical history and talk with you about the goals of Lutathera treatment. The doctor will use your medical history and the results of the blood test to see if Lutathera is right for you.

Your doctor or nurse will ask you about your medications. Make sure they know all the medications you're taking, including 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 doctor decide that you will have Lutathera treatment, your MITS doctor or nurse 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. Your last Lutathera infusion will be 24 weeks (about 5 and a half months) after your first infusion. You will come to MSK for each of your infusions.

Starting after your first Lutathera infusion, you will have a blood test every 2 weeks for 34 weeks (8 months). 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.

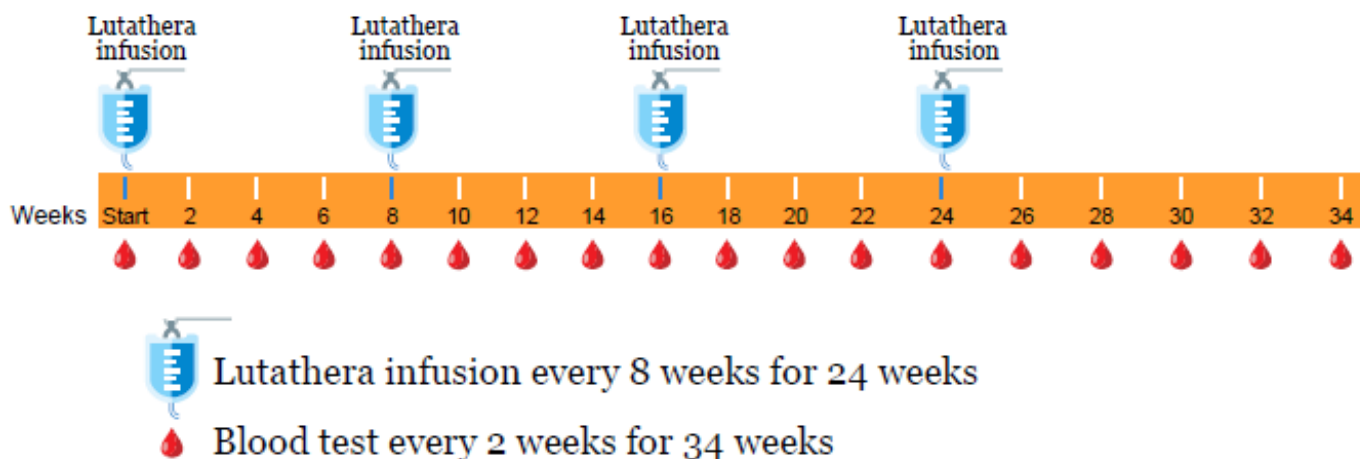


Figure 1. Lutathera treatment schedule

## Octreotide Injections (Shots) During Lutathera Treatment

You may be getting octreotide injections 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 doctor 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. **Don't use short-acting octreotide for 24 hours before each Lutathera infusion, unless your doctor gives you other instructions.**

## About Your Lutathera Infusion Appointments

Your infusion appointments will take all day. You should plan to arrive for your appointments by 8:30 AM and leave around 5:00 PM. You may want to bring a book, portable music player, 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 67<sup>th</sup> Street and 68<sup>th</sup> Street). Turn left by the security desk in the lobby, go up the stairs to the 4<sup>th</sup> floor, and check in at the reception desk. A staff member will bring you to the MITS therapy suite.

If you would like to use an elevator instead of the stairs, or if you're not sure where to go, you can ask the security guard for help.

## **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).
- About 45 minutes after you get 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 doctor will connect the Lutathera to your other IV line. It will be infused over 30 minutes.

During and after the medication infusions, you may have:

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

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

If a family member or friend came to your appointment with you, they can stay with you until the doctor comes in to start your Lutathera infusion. When the doctor comes in, your visitor(s) will be asked to leave the room while you get the Lutathera and the rest of the amino acid hydration solution.

### **Nuclear medicine scan**

After the amino acid infusion is finished, you will 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 5 minutes.

After the nuclear medicine scan, you may need to stay in the MITS therapy suite for 2 to 3 hours. The timeline below shows what to expect during each of your Lutathera infusion appointments.

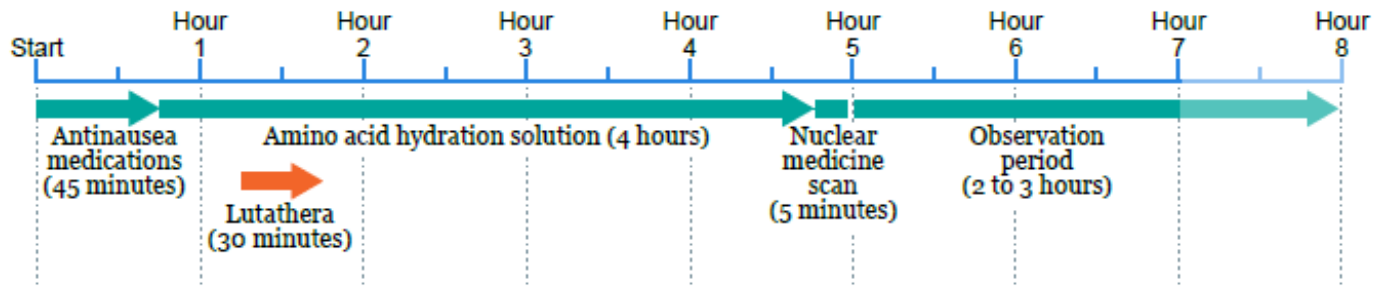


Figure 2. Lutathera appointment timeline

## 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.

- Don't use public transportation (such as a bus or train) to get home from your infusion appointment. It's okay to take a taxi. If you drive home after your appointment and there's another person in the car with you, sit as far away from them as you

can.

- Avoid being in close physical contact with other people. It's ok to be in close contact with another person for a short period of time (such as a brief hug), but 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 be leave your body in your blood, urine (pee), and other fluids.

The number of days you will need to follow these precautions is based on your specific Lutathera treatment. It can range from 2 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 1 month 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 2 weeks after a Lutathera infusion, tell the staff member helping with the collection that you have been treated with radioactive Lutetecium-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 2 weeks after a Lutathera injection, tell one of the medical providers that you have been treated with radioactive Lutetecium-177. There might still be some radiation in your body. They medical providers should take universal precautions. They don't 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 a condom during sexual activity.**
- **Don't become pregnant.**
- **Don't get a person pregnant.**
- **Don't breastfeed.**



If you have questions, talk with your MITS doctor or nurse.

## Contact Information

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

- Monday through Friday from 9:00 AM to 5:00 PM, call 212-639-3146. Ask for the Molecular Imaging and Therapy Service nurse.
- After 5:00 PM, 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](http://www.mskcc.org/pe) to search our virtual library.

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