How drug is given: by vein (IV)

Purpose: To treat tumors called gastroenteropancreatic neuroendocrine tumors or GEP-NETs.

GEP-NETs are tumors of the neuroendocrine cells from the stomach or pancreas that make hormones that cause symptoms such as flushing and loose stools.

Treatment plan

1. The treatment is four shots of $^{177}$Lu-DOTATATE (LUTATHERA®) every 8 weeks.

2. Your doctor may suggest you stop taking somatostatin analog medications during treatment. These meds reduce symptoms cause by your cancer. An example is octreotide.
   - Stop a long-acting analog at least 4 weeks before the first treatment.
   - Stop a short-acting analog for at least 24 hours before the first treatment.

3. Your blood cell counts will be checked before each infusion.
   - Blood may be drawn up to four weeks before the first infusion
   - Blood may be drawn again within the week before the infusion

Treatment Day

Checking in at the Nuclear Medicine Department (Dana Building, floor L2):

- You will change into a gown or scrubs for the day.
- An IV will be placed in your arm.
- You will first get anti-nausea medication.
- In 30 minutes you will begin an amino acid infusion to help protect your kidneys. This med. takes 6-7 hours.
- Then 30 minutes after starting the amino acid infusion, you will get the $^{177}$Lu-DOTATATE infusion. This takes about 30 minutes.
- At the end of the day, you may get a dose of your usual somatostatin analog.
Things that may happen during or within hours of treatment

1. A nuclear medicine doctor will supervise your care and address any questions you might have before you leave for the day.

2. A nurse and/or technologist will help you throughout the day.

3. During the infusion or within the first 24 hours, you could feel a reaction to the medication. This is called neuroendocrine hormonal crisis. If you have dizziness, flushing, loose stool, trouble breathing, or tightness of throat, **ALERT your care team right away or seek immediate medical attention.**

4. At least once each hour, you will be asked to empty your bladder. Drink lots of fluids and tell your cancer care team if you notice any signs of dehydration or trouble voiding.

5. Mild to moderate nausea and vomiting may happen. You will be given medicine to help with this during the treatment.

6. Loose stools or loose stools may happen after the drug is given. If you have loose stools that lasts for more than 24 hours, call your doctor or nurse right away.

Things that may happen a few days to weeks later

1. Continue to empty your bladder at least once an hour for the next 2 days after treatment. You do not need to wake from sleep to empty your bladder unless you feel the need.

2. It is recommended to move your bowels daily and use a laxative if needed.

3. Your blood cell counts may drop. This is known as bone marrow suppression. Keep all lab appointments and tell your cancer care team if you have shortness of breath, feeling very tired, fever, chills, cough, bleeding, or bruising.

4. Your kidney function may be affected.

5. Your liver function may be affected.

Things that may happen after treatment ends (even months to years later)
1. In rare cases, you may be at risk of getting some other type of cancer after taking \(^{177}\text{Lu-DOTATATE (LUTATHERA)}\) such as myelodysplastic syndrome or leukemia.

**Fertility and Precautions during Sex:**

- \(^{177}\text{Lu-DOTATATE (LUTATHERA)}\) may affect fertility and harm an unborn baby.
- Avoid sexual activity for 7 days after each treatment.
- It is very important to use birth control if you are having sex.
- Women with reproductive potential and males with such partners should use effective contraception during treatment and continue for:
  - Woman 7 months after the final dose
  - Men 4 months after final dose.

Please talk to your doctor or nurse about effective types of birth control that you can use or any concerns about fertility.

**Safe Handling of Body Waste at Home**

For 30 days after treatment, a very small amount of radioactivity may be found in your vomit, urine, stool, and sweat. Care must be taken to prevent your body waste from coming into contact with others.

**Toilet use:**

- You can use the toilet (septic tank or city sewage) as usual. Sit while urinating, rather than stand. Avoid using a urinal or commode if possible.
- Use toilet paper every time.
- Wash your hands well with soap and water after using the toilet. If urine, vomit, or stool get on your body, wash it with soap and water.
- If you have loose stools or urinary incontinence during the first week after an injection, use protective underwear, such as Depends or Poise pads. This helps prevent contamination of clothing and your home. Place used underwear in a plastic bag and store for 70 days before throwing out in the normal trash. The plastic bag needs to be stored in an isolated location, where no person will come across it. Please talk with your doctor or nurse if you have any questions.
• If you cut yourself, carefully wipe up all the blood with flushable paper products and flush them down the toilet.

**Nursing:**
• Nursing should be stopped during treatment. Ask your doctor when you can resume breastfeeding.

**Personal care:**
• Shower every day for at the first 7 days after treatment.

**Caregivers:**
• When handling patient waste, wear disposable gloves. If flushable, throw them in the toilet and flush after each use. If not flushable, store them in a plastic bag for 70 days before throwing out the trash. The plastic bag should be stored in an isolated location, where no person will come across it. Wash your skin with soap and water. Continue to do this for 2-3 days after treatment.

• Pregnant caregivers should not handle patient body waste.

• Wear disposable gloves, empty body fluids into the toilet, and clean immediately any contaminated medical equipment such as catheters, colostomy bags, bedpan, water nozzle, etc.

**Laundry:**
• For the first two days after your treatment wash your underwear, pajamas, sheets, and any clothing with body fluids (sweat, blood, urine, feces) separately from other laundry, 2-3 times in the washing machine. Always wear disposable gloves.

**Personal Contact:**
• Avoid close contact and try to keep about 3 feet from people for 2-3 days after getting treatment.

• Limit contact with children under 10 years old for 7 days after getting treatment

• Limit contact with pregnant women for 15 days after getting treatment.

• You may return to work 2-3 days after treatment, unless working with pregnant women or children, and then the time should be changed for that reason.

• Sleep in separate beds at least 3 feet apart for 7 days after getting treatment.

**Trash:**
• Keep designated plastic trash bags separate from other trash, away from people and pets. Store for 70 days then place into normal trash.

**Hospital stay and emergency care:**
• Notify your doctor, the emergency room and dentist about your treatment.
Due to hormone release problems, your doctor may suggest you stay in the hospital overnight after treatment.

Carry your nuclear medicine dosing card with you for **1 months after treatment** and show it to all hospital/clinic staff.

**Travel:**

Carry your nuclear medicine dosing card with you for **1 month after treatment** as the presence of radioactivity could trigger alarms while traveling.

The information in this document includes some but not necessarily all of the possible side effects of this medication. The side effects listed in this teaching sheet may not be the same ones you experience. Your side effects may be different depending on how often you receive treatment (your schedule) and how much you receive each time (your dosage). Side effects may also vary if you are taking other medications. Please speak with your doctor or nurse if you have questions about possible side effects you may experience. This document should not take the place of conversations with members of your health care team.

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THIS SPACE RESERVED FOR WRITTEN COMMENTS OR NOTES FOR THE PATIENT AND FAMILY: