

#### PATIENT & CAREGIVER EDUCATION

# **About Your PET-CT with PYL or PSMA Tracer**

This information will help you get ready for your positron emission tomography (PET) computed tomography (CT) scan with PYL or PSMA tracer at MSK.

# **About your PET-CT with PYL or PSMA** tracer

A PET-CT scan is an imaging procedure that is used to:

- Find cancer cells.
- Plan your treatment.
- See how your treatment is working.

You'll have a CT scan with a low dose of radiation at the same time as your PET scan. CT scans take a fast series of x-ray pictures. The x-ray pictures are combined with your PET scan to create pictures of your soft tissues and bones.



You may also be scheduled for a diagnostic CT at the same time as your PET-CT. A diagnostic CT lets your healthcare provider learn more about your tissues, bones, and blood vessels.

Ask your healthcare provider for the resource *Computed Tomography (CT) Scan* (www.mskcc.org/pe/ct\_scan) to help you get ready.

#### **Tracer**

Before your PET-CT, you'll get a radioactive medication called a tracer. The tracer is attached to a substance that your cells and tissues use. Cancer cells use the substance differently than non-cancer cells.

The radioactive part of the tracer lets your healthcare provider see how your cells are using the substance. This helps them find any usage that is not normal. The tracer doesn't stay in your body long. It leaves your body mainly through your urine.

You will get the tracer through a catheter (thin, flexible tube). The catheter may be an intravenous (IV) line in your arm, hand, or Central Venous Catheter (CVC), if you have one.

Your PET-CT will use PYL or PSMA as the tracer.

# Getting ready for your PET-CT with PYL or PSMA tracer

#### Take devices off your skin

You may wear certain devices on your skin. Before your scan or procedure, device makers recommend you take off your:

- Continuous glucose monitor (CGM)
- Insulin pump

Talk with your healthcare provider about scheduling your appointment closer to the date you need to change your device. Make sure you have an extra device with you to put on after your scan or procedure.

You may not be sure how to manage your glucose while your device is off. If so, before your appointment, talk with the healthcare provider who manages your diabetes care.

# The day before your PET-CT with PYL or PSMA tracer

If you're getting anesthesia, read the "For People Getting Anesthesia" section at the end of this resource.

# The day of your PET-CT with PYL or PSMA tracer

#### What to expect when you arrive

Many staff members will ask you to say and spell your name and birth date. This is for your safety. People with the same or similar names may be having a procedure on the same day. Once you're in the department, you'll fill out a brief questionnaire.

Your care team will inject the tracer into your vein. You'll wait 60 minutes for your body to absorb the tracer. How long this takes will depend on the area of your body being scanned.

Try to relax and limit your movement during this time. You can sleep, read, listen to music, or watch videos while you're waiting. Ask for a blanket if you feel cold.

Your care team will ask you to urinate (pee) just before your scan.

### **During your PET-CT with PYL or PSMA tracer**

When it's time for your scan, your technologist will bring you to the scanning room. They will help you onto the scanning table. The machine looks like a large doughnut with a hole in the middle (see figure 1). This is the scanning ring (scanner). The scanner is about 3 feet (1)

meter) deep.

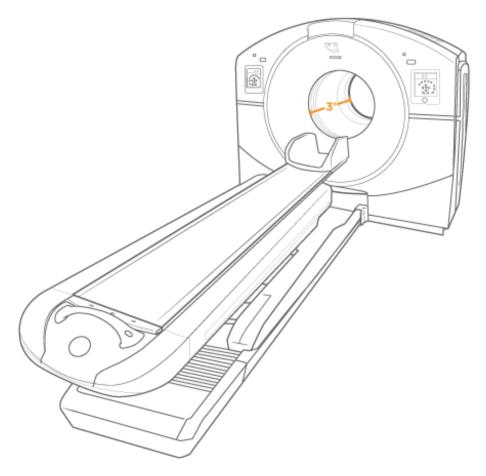


Figure 1. PET-CT machine

Once you're on the scanning table, the table will move slowly through the scanning ring. You must lie very still in the scanning ring until your scan is done. This can take 30 to 45 minutes, depending on the type of scan you're having.

If you're also scheduled for a diagnostic CT scan, you'll get a contrast infusion through your IV or CVC. An infusion is when medication is slowly put into your bloodstream. This will happen after your technologist

takes the first series of pictures. For more information, read *Computed Tomography (CT) Scan* (www.mskcc.org/pe/ct scan).

# What to do after your PET-CT with PYL or PSMA tracer

You may leave as soon as your scan is done, unless you have other tests or procedures scheduled. You'll get a card stating that you had a test done with a radioactive tracer and your test date. Keep this card with you because some security equipment can find radioactivity until it leaves your body. This should take less than a day.

Remember to stay hydrated after your scan. Drink water and other fluids throughout the rest of the day to help remove the tracer from your body. You can go back to your normal diet right away, unless you're given other instructions.

It is safe to be around other people, including pregnant people and children. You can spend time near others, and can kiss, hug, hold, and touch them.

#### **Your PET-CT results**

A radiologist will read your scan and send your results to your doctor. If your PET-CT was done to find cancer cells, your doctor should have your results in 2 business days. Ask your doctor how they will share your results with you. If your PET-CT was done to plan your treatment, your doctor will use the images to plan your care.

### For people getting anesthesia

If you are getting anesthesia (medication to make you sleepy) during your PET-CT, follow these instructions.

### What to do the day before your PET-CT

### Arrange for someone to take you home

You must have a responsible care partner take you home after your procedure. A responsible care partner is someone who can help you get home safely. They should be able to contact your care team if they have any concerns. Make sure to plan this before the day of your procedure.

If you don't have a responsible care partner to take you home, call one of the agencies below. They'll send someone to go home with you. There's a charge for this service, and you'll need to provide transportation. It's

OK to use a taxi or car service, but you still need a responsible care partner with you.

### Agencies in New York Agencies in New Jersey

4649

Caring People: 877-227-

4649

## Instructions for eating and drinking: 8 hours before your arrival time



- Stop eating 8 hours before your arrival time, if you have not already.
  - Your healthcare provider may tell you to stop eating earlier. If they do, follow their instructions.
- 8 hours before your arrival time, do not eat or drink anything except these clear liquids:
  - Water.
  - Soda.
  - Clear juices, such as lemonade, apple, and cranberry juices. Do not drink orange juice or juices with pulp.
  - Black coffee or tea (without any type of

milk or creamer).

- ∘ Sports drinks, such as Gatorade®.
- Gelatin, such as Jell-O<sup>®</sup>.

You can keep having these until 2 hours before your arrival time.

# What to do the day of your PET-CT Instructions for drinking: 2 hours before your arrival time



Stop drinking 2 hours before your arrival time. This includes water.

### **Contact information**

If you have any questions or concerns, call the Molecular Imaging and Therapy Service (MITS, or the Nuclear Medicine service) at 212-639-6652. You can reach a staff member Monday through Friday from 9 a.m. to 5 p.m. After 5 p.m., during the weekend, and on holidays, call 212-639-2000.

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

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