

# Thyroid Cancer Survey Using I-123

## Information, instructions, and precautions

*This handout is for patients who will receive radioactive iodine for imaging to help look for thyroid cancer.*

### What is I-123?

I-123 is a type of radioactive iodine. It is used to find thyroid cancer.

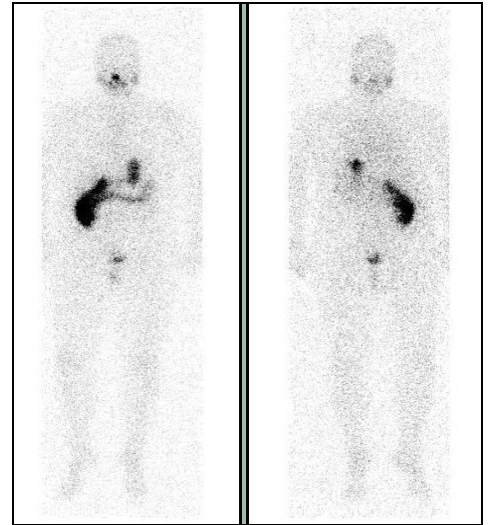
### What is a thyroid cancer survey?

A *thyroid cancer survey* helps your doctors see if there is any thyroid cancer in your body. If thyroid cancer is found during your survey, you may have it treated with a *therapeutic dose* of I-131, another radioactive iodine.

### How does it work?

We will ask you to swallow a small capsule that contains a *diagnostic dose* (4 millicuries) of I-123. Your intestines will absorb the iodine quickly, and it will enter your bloodstream.

Both thyroid cancer cells and thyroid tissue absorb iodine. As the I-123 moves through your body, it will go to your thyroid and to any thyroid cancer cells.



*Dark areas in these images show where the body absorbed or excreted I-123.*

We will then use a special camera to take images of your body. This camera can detect *gamma rays* (like X-rays) that the I-123 gives off.

The I-123 that is absorbed or excreted by your thyroid and thyroid cancer cells will show up as dark areas in the images. This will tell us if you have any:

- *Residual* thyroid tissue (small amounts that stay after your thyroid is removed)
- Areas where there are thyroid cancer cells

## What will happen during the survey?

This survey has 2 parts, on 2 separate days:

- On the first day, you will swallow the capsule that contains I-123.
- The next day, we will take pictures of your head, neck, and body. You will lie on your back on an exam table for about 1 to 2 hours while the camera scans your body.

## What are the side effects of the survey?

Side effects from I-123 are very rare. But there is a small risk of nausea on the day you swallow the capsule.

## What happens to I-123 after it enters my body?

Most of the I-123 your thyroid tissue does not absorb leaves your body in your urine and stool. The rest will simply decay over time.

## How do I prepare for the survey?

### Imaging

Tell your care team if you have had a CT scan in the last 3 months. If you have, this survey may interfere with your treatment plan.

### Low-iodine Diet

You must be on a **low-iodine diet** for 1 week before this survey. For instructions, please visit [www.thyca.org/pap-fol/lowiodinediet](http://www.thyca.org/pap-fol/lowiodinediet). If you do not use the internet, ask us for a printed copy.

### Medicines

- **If you are a “withdrawal” patient:**
  - Stop taking synthroid (Levothyroxine) for **at least 6 weeks before** your survey.
  - Stop taking cytomel (Liothyronine) for **3 weeks before** your survey.
- **If you are a “Thyrogen rTSH” patient:**
  - You may keep taking your thyroid medicines.
  - Before you take the I-123 capsule, you will receive Thyrogen rTSH injections on 2 different days.
  - You will have a blood draw before your first dose of rTSH.

## On the Day You Take Your Dose of I-123

- Do **not** eat any food or drink anything but water for 2 hours before and after your appointment. We suggest you drink lots of water.
- You will have a blood draw just before you receive your diagnostic dose. The lab will check your blood counts and thyroid hormone levels.

## For Women of Childbearing Age

- You **must** tell your care team if you are pregnant or think you might be pregnant. If you are pregnant, we advise you **not** to have this thyroid cancer survey.
- If you will receive I-131 therapy after your thyroid cancer survey, **you must have a blood pregnancy test before you take the radioactive iodine. This is because I-131 can harm an unborn baby.** We will need to do this test even if you have had a hysterectomy or have been through early menopause. This test will be done the day you take your I-123 dose. It may be done again on the day of your I-131 therapy.
- **Tell us if you are breastfeeding.** If you are breastfeeding, we **cannot** give you radioactive iodine. The radiation would collect in your breast milk and pass to your child. It would also expose your breast tissue to extra radiation from the I-131 in the milk. Women who have I-131 therapy after this survey:
  - Must stop breastfeeding for 3 months before they take the I-131 dose.
  - Cannot resume breastfeeding with their current infant after treatment. They may breastfeed future newborns.

## After Taking Your Dose of I-123

After you swallow the I-123 capsule:

- For 2 hours, do **not** eat any food or drink anything but water. An empty stomach helps your body absorb the iodine.
- Starting 2 hours after your dose, you can resume the low-iodine diet.
- For the next 24 hours, keep drinking lots of water. Fluids help flush the extra I-123 from your body. You may also drink other fluids that are allowed on the low-iodine diet.

- Remember to return to the Nuclear Medicine department for a scan the day **after** you take your diagnostic dose.
- **Stay on your low-iodine diet while you are having your diagnostic scans and any iodine therapy.** If you are having I-131 therapy, you will need to stay on this diet for a few days after your therapy (see “After Your Scan” on page 4).

## The Night Before Your Scan

After you have taken your dose of I-123, you must empty your bowels to remove any I-123 that may be in your stool. Stool that contains I-123 could give a *false positive* (incorrect) reading during your scan.

To make sure your bowels empty all the way, **use an over-the-counter laxative** (one you can buy without a prescription) the night before your scan. Be sure to use a product that does **not** contain iodine. Brands to try include Miralax, Bisacodyl, Milk of Magnesia, Magnesium Citrate, and Dulcolax suppositories. Please tell your care team if you cannot take laxatives.

## After Your Scan

- **If you are NOT having I-131 therapy**, you can resume your normal diet after your final scan.
- **If you ARE having I-131 therapy**, you must wait to resume your normal diet until 3 days after you swallow the I-131 capsule.

## Safety Precautions

Drink lots of water to help flush the I-123 out of your body.

## Who reads the thyroid cancer survey scan? When will I get the results?

A Nuclear Medicine doctor will read your thyroid cancer survey scan. This doctor also will review any other scan results that you bring with you.

If you will have I-131 therapy after your thyroid cancer survey:

- The Nuclear Medicine doctor may also talk with you about some of the findings of your survey.
- We may need to do more imaging before your therapy. If this occurs, your therapy might be delayed 1 day.

If you are **not** scheduled for I-131 therapy right away, the provider who referred you for this test will give you your survey results within about 3 days.

**To Learn More**

To learn more about a thyroid cancer survey using I-123 radioactive iodine, visit the Thyroid Cancer Association website at [www.thyca.org](http://www.thyca.org).

**Who to Call**

Clinic or Department	During office hours	After hours and on weekends and holidays
UWMC - Montlake Imaging Services	206.598.6200	Call 206.598.6190 and ask to page the Nuclear Medicine Resident on call.
UWMC - Montlake Nuclear Medicine	206.598.4240	
Seattle Cancer Care Alliance Endocrine Clinic	206.288.1160	Call 206.598.6190 and ask to page the Nuclear Medicine Resident on call.

**Questions?**

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

See “Who to Call” on this page for UWMC and SCCA numbers and how to get help after hours.