Thyroid Cancer Survey Using I123
Information, instructions, and precautions

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

What is I123?
I123 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 I131, another radioactive iodine.

How does the survey work?
We will ask you to swallow a small capsule that contains a diagnostic dose (5 millicuries) of I123. Your intestines will absorb the iodine quickly, and it will enter your bloodstream.

Both thyroid cancer cells and thyroid tissue absorb iodine. As the I123 moves through your body, it will go to your thyroid and to any thyroid cancer cells.

We will then use a special nuclear medicine camera to take images of your body. I123 gives off gamma rays (like X-rays) that this camera can detect. The I123 that is absorbed 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 remain after your thyroid is removed)
- Areas where there are thyroid cancer cells

Dark areas in these images show where I123 was absorbed by the body.
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 I123.

• 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 cameras scan your body.

What are the side effects of the survey?
Side effects from I123 are very rare. But there is a small risk of nausea on the day you swallow the capsule.

What happens to the radioactive iodine after it enters my body?
Most of the I123 your thyroid tissue does not absorb will leave your body in your urine and stool. The rest will simply decay over time.

How do I prepare for the survey?
Diet
You must be on a low-iodine diet for 1 week before your survey. For low-iodine diet instructions:

• Visit www.thyca.org/rai.htm#diet.
• If you do not use the internet, ask for a printed copy of this diet.

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 I123 capsule, you will receive Thryogen rTSH injections on 2 different days.

On the Day You Take Your Dose of I123
• Do not eat any solid foods 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

- You **must** tell us if you are pregnant.

- If you are of childbearing age and will receive I131 therapy after your thyroid cancer survey, **you must have a blood pregnancy test before you take the radioactive iodine.** 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 I123 dose. It may be done again on the day of your I131 therapy.

- **Please tell us if you are breastfeeding.** If you are breastfeeding, you may **not** receive radioactive iodine, since it may be passed to your child in your breast milk. Women who will have I131 therapy after their thyroid cancer survey usually must stop breastfeeding for 3 months before they take the I131 dose.

After Taking Your Dose of I123

- Do **not** eat any solid foods or drink anything but water for 2 hours after you swallow the I123 capsule. An empty stomach will help your body absorb the iodine.

- Starting 2 hours after your dose, you can eat as usual. We advise you to keep drinking lots of water for the next 24 hours. Fluids help flush the extra I123 from your body. You may also drink juice to help with flushing.

- 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 I131 therapy, you will need to stay on this diet for a few days after your therapy (see “After Your Scan” below).

The Night Before Your Scan

After you have taken your dose of I123, you must empty your bowels to remove any I123 that may be in your stool. Stool that contains I123 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, such as Miralax, Bisacodyl, Milk of Magnesia, Magnesium Citrate, and Dulcolax suppositories.

After Your Scan

- **If you are NOT having I131 therapy**, you can resume your normal diet after your final scan.

- **If you ARE having I131 therapy**, you must wait to resume your normal diet for 3 days after you swallow the I131 capsule.
Safety Precautions

- Drink lots of water to help flush the radioactive iodine out of your body.

Who reads the thyroid cancer survey scan and 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 are scheduled for I131 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 I131 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 I123 radioactive iodine, visit the Thyroid Cancer Association website at www.thyca.org.

Who to Call

UW Medical Center (UWMC) Patients

UWMC Imaging Services ................................................. 206.598.6200
UWMC Nuclear Medicine ............................................... 206.598.4240

After hours and on weekends and holidays, call 206.598.6190 and ask for the Nuclear Medicine resident on call to be paged.

Seattle Cancer Care Alliance (SCCA) Patients

SCCA Endocrine Clinic .................................................... 206.288.1160

After hours and on weekends and holidays, call 206.598.6190 and ask for the Nuclear Medicine resident on call to be paged.