

Understanding the key terms related to

THYROID CANCER

There is often a great deal of confusion in the meaning of some terms related to thyroid cancer and its management. To help clear up any confusion you may have, we have provided some helpful definitions for you.

ADJUVANT THERAPY WITH RADIOACTIVE IODINE—The use of radioactive iodine to destroy suspected but unproven spread of your thyroid cancer to other parts of the body

LOW-RISK THYROID CANCER—Defined by leading medical societies as differentiated thyroid tumors that are statistically less likely to spread to other parts of the body

DIFFERENTIATED THYROID CANCER—The most common type of thyroid cancer, also referred to as papillary or follicular carcinoma. It is usually slow growing and develops from the follicular cells in the thyroid gland. About 90% of thyroid cancers are differentiated and have the best rates of treatment success when surgery and radioactive iodine are used in combination

TIME to talk to
YOUR PHYSICIAN

Now that you know about radioactive iodine (iodine-131) and its benefits and risks, you and your doctor can decide **WHAT'S RIGHT FOR YOU.**

The TIME program was developed to help patients with differentiated thyroid cancer make informed decisions about their treatment. Developed with leading physicians in endocrinology and nuclear medicine, the program provides useful and important educational materials that give patients the information they need to have productive conversations about treatment options with their doctors. We encourage you to talk to your doctor for any questions or concerns about radioactive iodine or your thyroid cancer management plan in general.



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TIME to consider
if you should receive

RADIOACTIVE IODINE (IODINE-131)

Knowing the benefits and risks of radioactive iodine enables you and your doctor to decide **WHAT'S RIGHT FOR YOU.**

It is in your best interest to have an active role in deciding whether treatment of your differentiated thyroid cancer includes the use of radioactive iodine after surgery. In order to work with your doctor to decide what is right for you, you need to give "informed consent." This simply means that you understand and appreciate the potential benefits, risks, and all possible options related to your treatment.

WHY INFORMED CONSENT IS IMPORTANT

While radioactive iodine has been used successfully in thyroid cancer for decades, doctors do not always agree on when it should be used and at what dose. This guide is designed to help you understand the benefits and risks of radioactive iodine, so the decision on whether or not to receive it is based on your informed consent. It includes answers to questions or concerns that thyroid cancer patients commonly have.



Addressing common questions
and concerns related to

RADIOACTIVE IODINE (IODINE-131)

What is the purpose of a radioactive iodine (iodine-131) scan?

A small dose of radioactive iodine may be used to perform a scan to help your doctor determine the most appropriate treatment for you and as a tool to monitor the status of your disease over time.

- **Staging** to determine the extent of remaining thyroid tissue or thyroid cancer, including cancerous cells that have spread to other parts of the body
- **Determining** the right dose for you that will destroy the thyroid cancer and minimize side effects, based on how your body responds to radioactive iodine
- **Follow up** whole-body scan to monitor the status of your disease over time

What is the purpose of radioactive iodine (iodine-131) therapy?

- **Ablation** destroys normal thyroid tissue that remains following the initial surgery
- **Adjuvant therapy** destroys thyroid cancer that is suspected to remain after surgery or has spread to other parts of the body

Why should I consider radioactive iodine (iodine-131) therapy?

- Radioactive iodine has been used to successfully treat differentiated thyroid cancer for over 70 years¹
- 10 years after receiving radioactive iodine, more than 96% of differentiated thyroid cancer patients are still alive and their cancer has not progressed²
- Radioactive iodine minimizes the potential for any remaining or “escaped” thyroid cancer cells from becoming more aggressive and unresponsive to later treatment³
- Patients considered to have an intermediate or high risk of the thyroid cancer coming back have reduced risk of recurrence after receiving radioactive iodine²
- Patients may receive more than one treatment of radioactive iodine if needed

Should I worry about radiation?

Radiation may be a scary word to some people, but there is little reason to think that radiation from radioactive iodine can cause you significant harm.³ In fact, there are some misconceptions about radioactive iodine that exaggerate its risks. For example, it does not cause hair loss or prevent you from having children. And 80% or more of radioactive activity is usually eliminated in the first 48 hours after receiving radioactive iodine.⁴ Talk to your doctor about the risks.

What are the possible side effects of radioactive iodine (iodine-131)?

- Cancer therapies often have significant side effects, but radioactive iodine is among the best tolerated³
- Early side effects last for a short time and usually resolve on their own. Among the most common are:⁵
 - Nausea and upset stomach, which can be managed with anti-nausea medication
 - Swelling and tenderness of the salivary glands, which can be treated with anti-inflammatory and pain medications
 - Temporary taste changes
- Side effects that may start anytime after receiving radioactive iodine:³
 - Intermitent obstruction of saliva flow (12% of patients)
 - Dry mouth (5% of patients)
 - Blocked tear duct (5% of patients)
- While there is potential risk of developing another cancer after receiving radioactive iodine, it is very small. In a large study, the absolute risk of developing a secondary cancer after an average of 15 years following radioactive iodine therapy increased marginally from 0.68% to 0.8%. Overall, the risk of developing any secondary cancer is less than 1%⁶

OBSERVATION-ONLY—This non-standard experimental approach describes when a thyroid cancer patient does not undergo surgery or receive radioactive iodine and is merely monitored to see if the thyroid cancer progresses

WATCHFUL WAITING—Observation of a patient with the potential for putting a treatment plan in place. This term has been used to refer to both active surveillance and observation-only, which often leads to confusion

ACTIVE SURVEILLANCE—Frequent testing and monitoring after surgery to detect possible return of the thyroid cancer

REMNANT ABLATION—Radioactive iodine given to the patient after surgery to destroy remaining thyroid cells, which are usually noncancerous

RADIOACTIVE IODINE TREATMENT—Radioactive iodine treatment with the goal of destroying known, persistent, or recurrent thyroid cancer

THYROID-STIMULATING HORMONE (TSH) TESTING—Blood test used to help evaluate the appropriate level of thyroid activity in the body

THYROGLOBULIN (TG)—A unique protein that is only made by normal thyroid cells or thyroid cancer cells that can be a useful “marker” for diagnosis or to detect thyroid cancer cells after the thyroid has been removed



THYROIDECTOMY • IODINE-131 THERAPY • MONITORING • EDUCATION

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