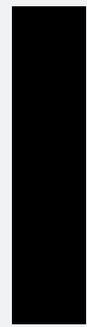


ISOTOPE

131



Iodine

⋮

Iodine-131

The Foundation of Thyroid Cancer
Care



Feature of the Month

Iodine-131

Iodine-131 (I-131) is one of the most established therapeutic radioisotopes in medicine and has been a trusted therapy of choice for physicians for decades.



Half-life of 8.02 days



I-131 is a reactor-produced radioisotope.



Best known for its role in treating thyroid diseases such as cancer and hyperthyroidism.

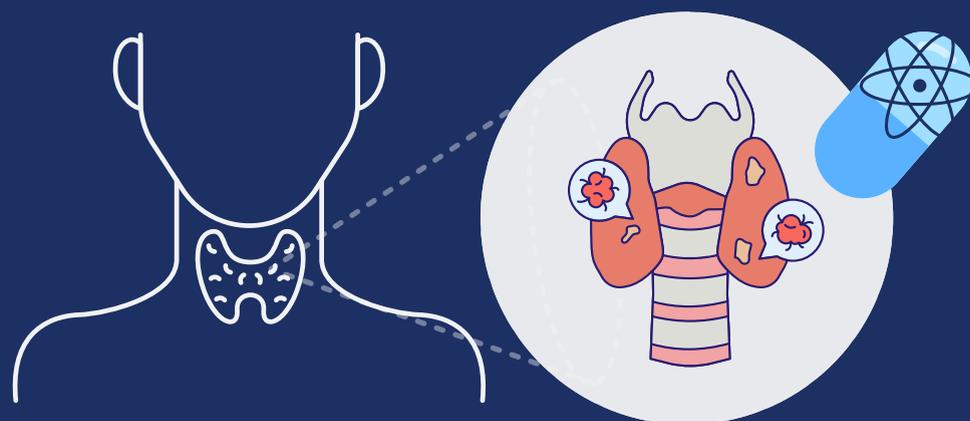
How it works

Naturally, the thyroid gland absorbs most of the iodine that enters the body. I-131 therapy targets cancerous and hyperfunctioning thyroid cells that absorb the radioactive iodine, which emits beta radiation.

How is it used?

I-131 is administered in either a liquid or pill form.

- Low doses are used for imaging. I-131 helps to find thyroid tissue, concentrating in cells, which can be located using a specialized gamma camera.
- Stronger doses are used for therapy applications. The radioiodine attaches to the differentiated thyroid cancer cells.



Iodine-131

Additional Applications

I-131 is also a common industrial tracer, used for non-destructive measurement and to support hydraulic fracturing.

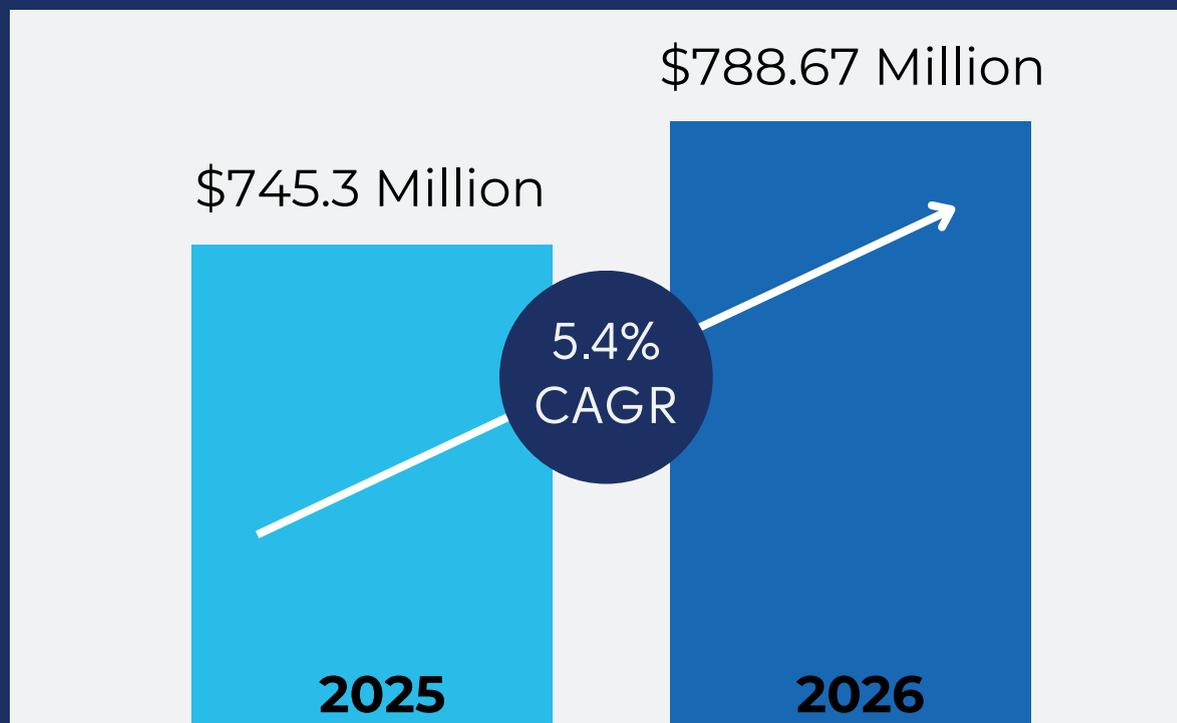
I-131 also supports various medical research applications such as antibody labelling.



DID YOU KNOW?

I-131 is used as an industrial tracer for leak detection. It has become one of the most commonly used gamma-emitting industrial radioactive tracers, with applications in isotope hydrology and leak detection.

Market Projections



The global I-131 market was valued at \$745.3million USD in 2025 and is projected to reach up to **\$788.67 million USD** by 2026, driven by increasing demand for the isotope in cancer therapy, imaging, industrial applications, and more.

Case Study on Canada's Leadership

Below is a snapshot of several CNIC members that are supporting Canada's leadership in I-131:



AtomVie Global Radiopharma is a GMP manufacturer and global distributor of multiple finished-dose therapeutic radiopharmaceutical products to Canada and over 28 countries. AtomVie has extensive expertise in I-131 radiolabeling.



NUCM Radiopharma is a Health Canada (DEL) and CNSC-licensed GMP manufacturer & distributor of radiopharmaceuticals, including I-131. NUCM provides liquid/capsule Radio-Iodine for multiple indications. NUCM services major oncology hospitals across Ontario with I-131 radiopharmaceuticals.



WWiKY Biosciences is a biotechnology company specializing in the research, development, preclinical and clinical evaluation of radiotheranostic products. WWiKY's lead asset, [I-131]-Hypoxycin-1™, is Health Canada-approved for a Phase I/II clinical trial in cancer patients, leveraging the power of I-131.



Isologic Innovative Radiopharmaceuticals recently launched a best-in-class automated robot for the production of I-131 capsules that improves dose accuracy, production reliability and operator safety to better meet the needs of Canadians patients and physicians.



isoSolutions is a global leader in the distribution, marketing, and sales of nuclear medicine products, including I-131, and facilitates the availability of the isotope for R&D, pre-clinical, clinical and commercial applications in collaboration with suppliers all over the world.



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