

Provincial Isotope Sector Briefing Nova Scotia



Image from Eden Radioisotopes

Executive Summary



Advancing Research & Development

Nova Scotia is leading the charge in Atlantic Canada for the research and development of isotopes.



Investing in future infrastructure & commercialization

Investing in new diagnostic capabilities and state-of-the-art equipment, and providing commercialization funding pathways to bring research to the market.

Isotope Infrastructure Development



QEII Cyclotron

Central to Nova Scotia's isotope production is the province's cyclotron located at the QEII Health Sciences Centre in Halifax.



FDG Supply

Prior to the QEII cyclotron, Nova Scotia sourced its FDG for PET scans from Montreal. Given the short half-life, the effectiveness of the product was impacted by the time it reached Halifax, which impacted PET scan wait times.



68Ga-DOTATATE PET

Since 2021, the province has delivered 68Ga-DOTATATE PET for neuroendocrine tumours.



4,000 FDG PET Scans

are performed annually in Nova Scotia, primarily for oncology, with additional applications in neurology and cardiology



68Ga-PSMA

Since 2022, Nova Scotia has provided 68Ga-PSMA for prostate cancer, making Nova Scotia the first in Atlantic Canada to perform 68Ga-PSMA PET scans.

Nova Scotia is also home to radiopharmaceutical production facilities:

- FDG production centre
- Gallium-68 generators
- Provincial radiopharmacy, hotlab and wetlab facilities

Provincial Isotope Sector Briefing Nova Scotia

1st

in Canada to install a StarGuide SPECT/CT scanner, a 12 CZT detector that can not only scan patients in 3D but is also optimized for certain theranostics procedures

100

patients were scanned in the first month of operation, which helped reduce wait times for diagnostic imaging in the province

2

new units to be installed at the QEII's Victoria General site and Cape Breton Regional Hospital

Workforce Development and Education

Dalhousie University is Nova Scotia's leading academic institution in nuclear medicine. Dalhousie's Radiology Research Directors and physicians are recognized internationally and have received several research awards for their leadership in the space.




Dalhousie Nuclear Medicine participates in both investigator-driven research and industry-sponsored research, including novel PET radiotracers and radioisotope therapies.



Patient Access to Life-Saving Radiopharmaceuticals



In August 2020, **Lutathera** became publicly available in Nova Scotia.

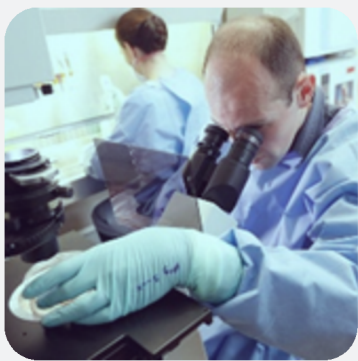


Nova Scotia was the second province in Canada to reimburse **Pluvicto** in February 2025.



Boston Scientific's **TheraSphere™ Y-90 Glass Microspheres** is approved for use in Nova Scotia for liver cancer.

Clinical Trials




Nova Scotia is actively involved in a variety of national and international clinical trials at both the Nova Scotia Community College (NSCC) and Saint John Regional Hospital (SJRH). At Nova Scotia Health, the Atlantic Clinical Cancer Research Unit (ACCRU) plays a key role in the province's cancer care strategy by ensuring patients in Nova Scotia have access to leading edge clinical trials.

30 sub-investigators and primary investigators

ACCRU supports approximately 30 sub-investigators and primary investigators (medical oncologists, radiation oncologists and gynecological oncologists).

55+ Clinical Trials

ACCRU has 45-55 clinical trials in start-up and 20-25 active clinical trials. ACCRU is also leading the way on a new clinical trial network structure led by the Nova Scotia Health Innovation Hub.



DID YOU KNOW?

In February 2026, **ABK Biomedical**, based in Halifax, Nova Scotia, announced an important milestone: the completion of patient enrollment in its pivotal U.S. FDA Investigational Device Exemption (IDE) study, ROUTE90. The study evaluates Eye90 microspheres®, a novel Yttrium-90 (Y-90) radioembolization device, for the treatment of hepatocellular carcinoma (HCC), the most common form of primary liver cancer.



Provincial Isotope Sector Briefing Nova Scotia

Commercialization Success



Nova Scotia's Business Development agency provides support for the **commercialization of innovations developed within Nova Scotia Health** through the engagement of partners, contract negotiation, patents, and supporting commercialization through a Nova Scotia Innovation Hub that offers the resources and funding to bring an idea to market.



The Early-Stage Commercialization Fund provided up to **\$50,000 per project** to move university, college, and university-affiliated hospital research to market. The fund is aimed at assisting the academic community in pursuing entrepreneurial opportunities.

Leading Companies and Organizations



 **Halifax**

Focused on researching, developing, and commercializing breakthrough medical device therapies to improve treatment outcomes and the lives of patients.



 **Halifax, Bedford**

World-class engineering and nuclear services organization, connecting people, data and technology to transform the world's infrastructure and energy systems.



 **Halifax**

Foundational in helping to share and deliver critical research projects which have led to the expansion of the Canadian nuclear isotope sector.



 **Halifax**

Dalhousie Nuclear Medicine has a strong tradition of research. In addition to investigator-led research, they participate in industry-sponsored research including novel PET radiotracers and radioisotope therapies.

Provincial Isotope Sector Briefing Nova Scotia

References

[AECL & CNL build on longstanding relationship with the University of New Brunswick through collaborative research agreement - AECL](#)

[Cape Breton hospital receives new scanner for cancer, heart disease](#)

[Department of Diagnostic Radiology - Dalhousie University](#)

[PEPTIDE RECEPTOR RADIONUCLIDE THERAPY - CNETS](#)

[Nova Scotia shows leadership in publicly reimbursing Pluvicto™ for eligible patients with advanced prostate cancer](#)

[QEII Health Sciences Centre first in Canada to acquire StarGuide Hybrid SPECT/CT nuclear medicine scanner through GE HealthCare | Nova Scotia Health](#)

[QEII Nuclear Medicine - Department of Diagnostic Radiology - Dalhousie University](#)

[Technology Commercialization | Nova Scotia Health Innovation Hub](#)

[The Atlantic Clinical Cancer Research Unit provides care and hope through research | Nova Scotia Health Innovation Hub](#)