Gamzook’aamin aakoziwin

FIGHTING CANCER TOGETHER

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Naming of the Partnership
by Polly Keeshig-Tobias, Knowledge Keeper
The name of the partnership, Gamzook'aamin aakoziwin, was developed by Polly Keeshig-Tobias, a Knowledge Keeper, language speaker and member of the Saugeen Ojibway Nation (Chippewas of Nawash Unceded First Nation). Polly worked closely with other SON Knowledge Keepers, Elders, and language-speakers to bring it to life.

It translates to "We are teaming up to fight the sickness". This captures the heart of the partnership and its shared mission: fighting cancer together.

Logo design by Emily Kewageshig
The Gamzook'aamin aakoziwin project artwork was created by Emily Kewageshig, a talented artist, visual storyteller and member of the Saugeen Ojibway Nation (Saugeen First Nation).

Her design symbolizes diverse people coming together to heal, encircled by a ring representing the global impact of medical isotopes in the fight against cancer.

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A historic partnership

Gamzook'aamin aakoziwin — Anishnaabemowwin for "We are Fighting the Sickness Together" — represents a historic partnership between Saugeen Ojibway Nation (SON) and Bruce Power to grow together and realize a shared vision of better cancer treatment and stronger communities. Since 2019, this innovative partnership has allowed SON to benefit from the operations and industry on its territory and advance Bruce Power's commitment to economic reconciliation.

SON and Bruce Power have expanded the agreement and investment to ensure a stable, long-term source of additional revenues to contribute to SON self-determination for generations to come. At the same time, SON will help in the global fight against cancer by investing in the production of a a reliable supply of medical isotopes.

Expansion Benefits

- Starting in 2026, each SON Community receives stable funds from isotope revenues.
- SON will receive an even larger increase in isotope revenues when the loan servicing is completed in 2056.
- Revenues are distributed equally between Nawash and Saugeen.
- Revenues are fully controlled by Saugeen and Nawash and used however each community sees fit.
- Separately, starting in 2026, each SON Community will receive a separate SON Community Payment to ensure a significant and predictable source of revenue for SON.

Isotope revenues have supported community initiatives including the Saugeen Amphitheatre Restoration Project (left), local food banks (below), and the community arena in Nawash (bottom).

A blueprint for change

The Gamzook'aamin aakoziwin expansion sets a clear precedent for a new path for private companies like Bruce Power, and rights and title holders like SON, to work together as committed partners.

Historically, SON has not had economic benefits from site operations. The partnership expansion deal was structured to help ensure SON interests are considered throughout. This structure also reflects Bruce Power's efforts to advance economic reconciliation, while continuing to supply cancer-fighting medical isotopes to global markets.

SON-First Facts

SON Revenues Come First
SON Isotope Revenues are prioritized — paid out before any revenues to Bruce Power.

Zero Upfront Cost for SON
Unlike many Indigenous investment models, SON's approach requires no out-of-pocket funding.

Built for Generational Impact
Funding is designed for long-term revenues, not just short-term gains.

Funding for Repayment
Like a portion of a paycheque withheld, funding comes from retained isotope revenues.

Loan for Funding is De-Risked
The creation of the SON Special Purpose Vehicle (SPV) "arms-length" entity owned by SON[1] protects SON. SON does not have the liability or obligation to repay the loan.

Support from the Government of Ontario
The private loan supporting the investment is backed by the Indigenous Opportunities Financing Program to further secure the arrangement[2].

1 The two communities comprising Saugeen Ojibway Nation are Chippewas of Nawash Unceded First Nation and Chippewas of Saugeen First Nation.

2 To learn more, see https://buildingonfund.ca/iofp/

"The expansion formalizes and builds upon our partnership to produce medical isotopes to fight cancer. As the First Nation Treaty holders of the lands where Bruce Power operates, this is a positive and meaningful step forward in our path toward economic reconciliation."

Jessica Keeshig-Martin
Acting Ogimaa Kwe
Chippewas of Nawash Unceded First Nation

"This is our attempt to lay a different blueprint for generations to come. It's time to establish something different and new—blend our knowledge base from our communities and the Western world to create a different pathway. This partnership has the ability to set a different narrative for our young people to follow and for industry.

I care deeply about relationships: with self, with one another, and with the Earth. Everything is interconnected, and isotopes have the unique ability to enhance the quality of those connections."

Chief Ritchie,
Saugeen First Nation

Innovation rooted in respect

Background

For many years, SON and Bruce Power were looking for projects to generate sustainable revenues that aligned with SON values and goals. In 2018, when the National Research reactor at Chalk River was permanently shut down, Bruce Power began to explore the possibility of producing medical isotopes on its commercial reactors. Discussions began around investing in medical isotopes together.

The first agreement

In 2019, SON and Bruce Power entered into an agreement to jointly market lutetium-177, which in Canada is used primarily to treat advanced prostate cancer. SON invested in isotopes through a virtual loan from Bruce Power and $9.1M from the Federal Government's Strategic Innovation Fund. Since 2022, this arrangement brought in millions of dollars that was divided equally between both communities.

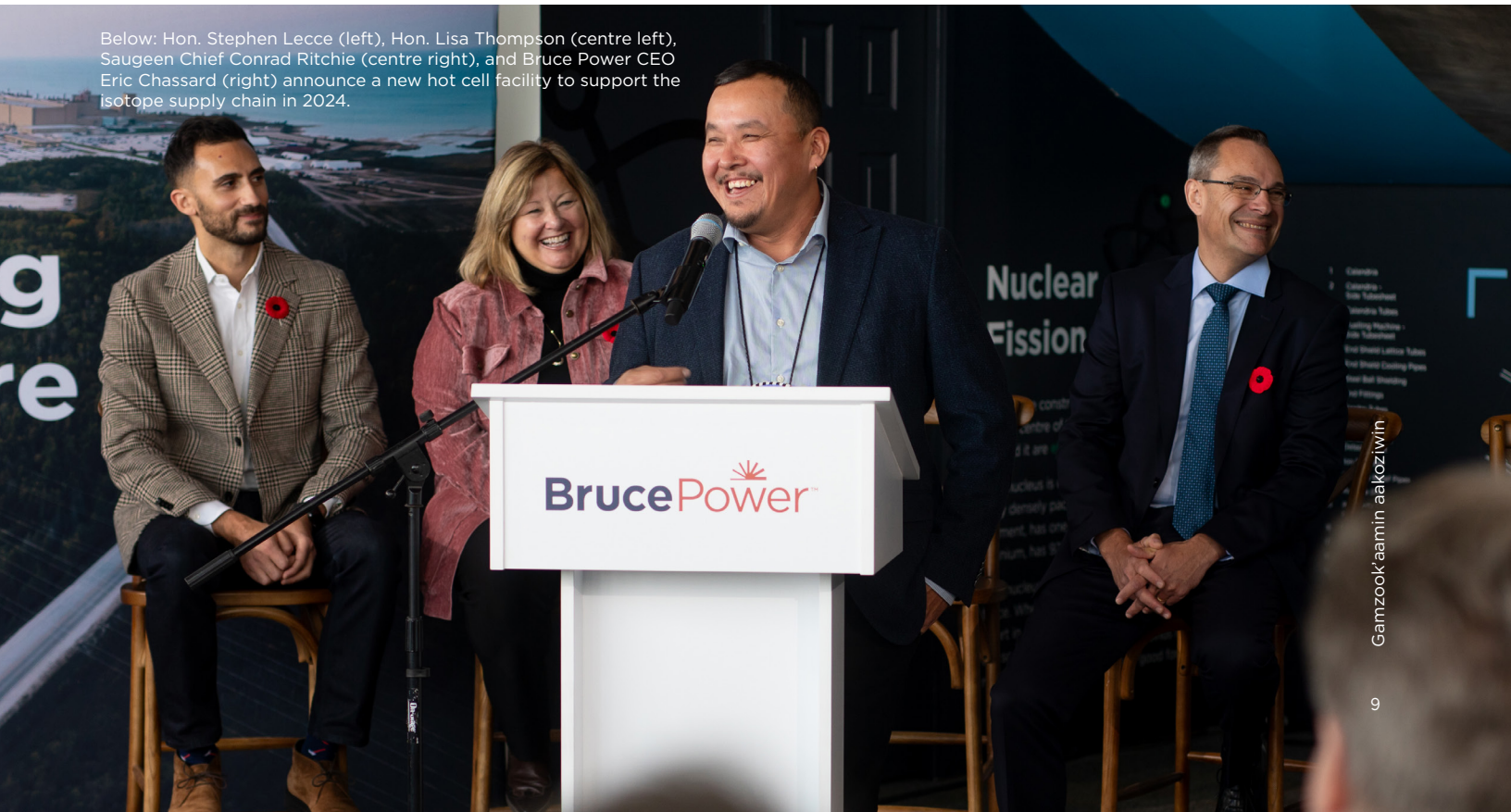
The second agreement

The partnership expansion, signed in 2025, ensures SON will continue to benefit from increased revenue over the long term. The creation of Gamzook'aamin aakoziwin Limited Partnership (GALP) and the SON SPV further formalizes and strengthens this collaboration. Under the terms of the GALP agreement, SON will have enhanced rights and protections.

The future

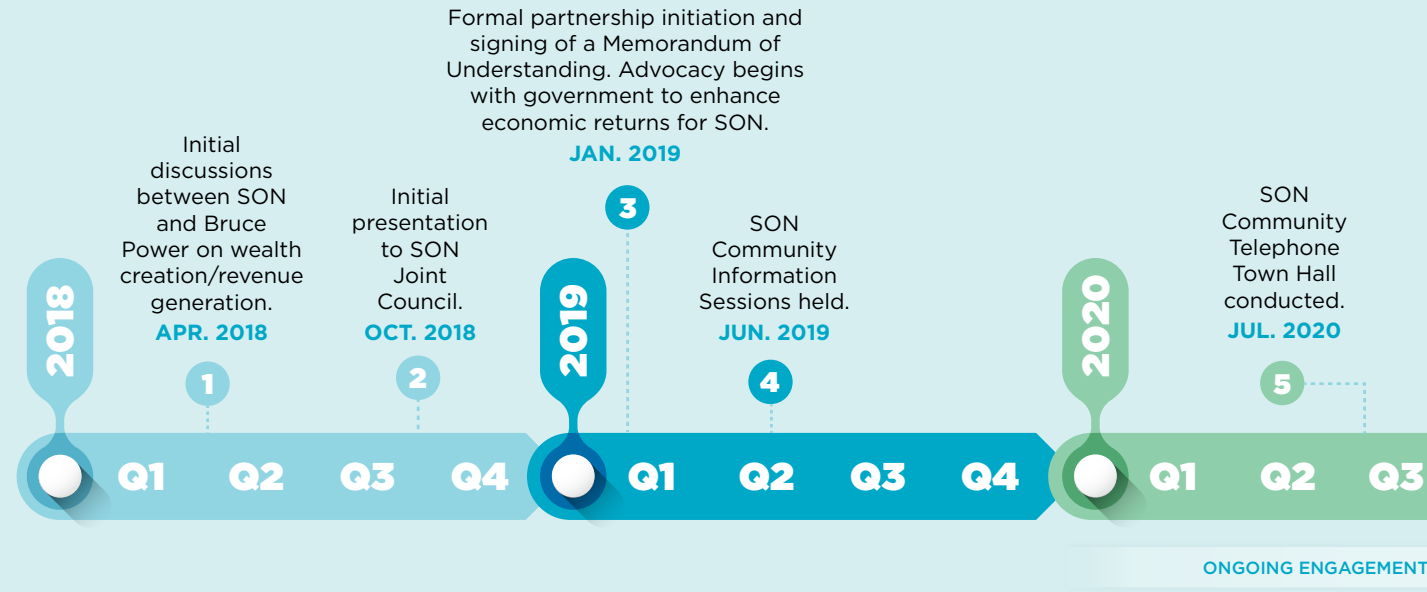
The future of precision medicine using isotopes is expected to grow, with ongoing research into new isotopes to treat a variety of cancers. As future isotope investments are explored, SON will have the opportunity to participate before other investors.

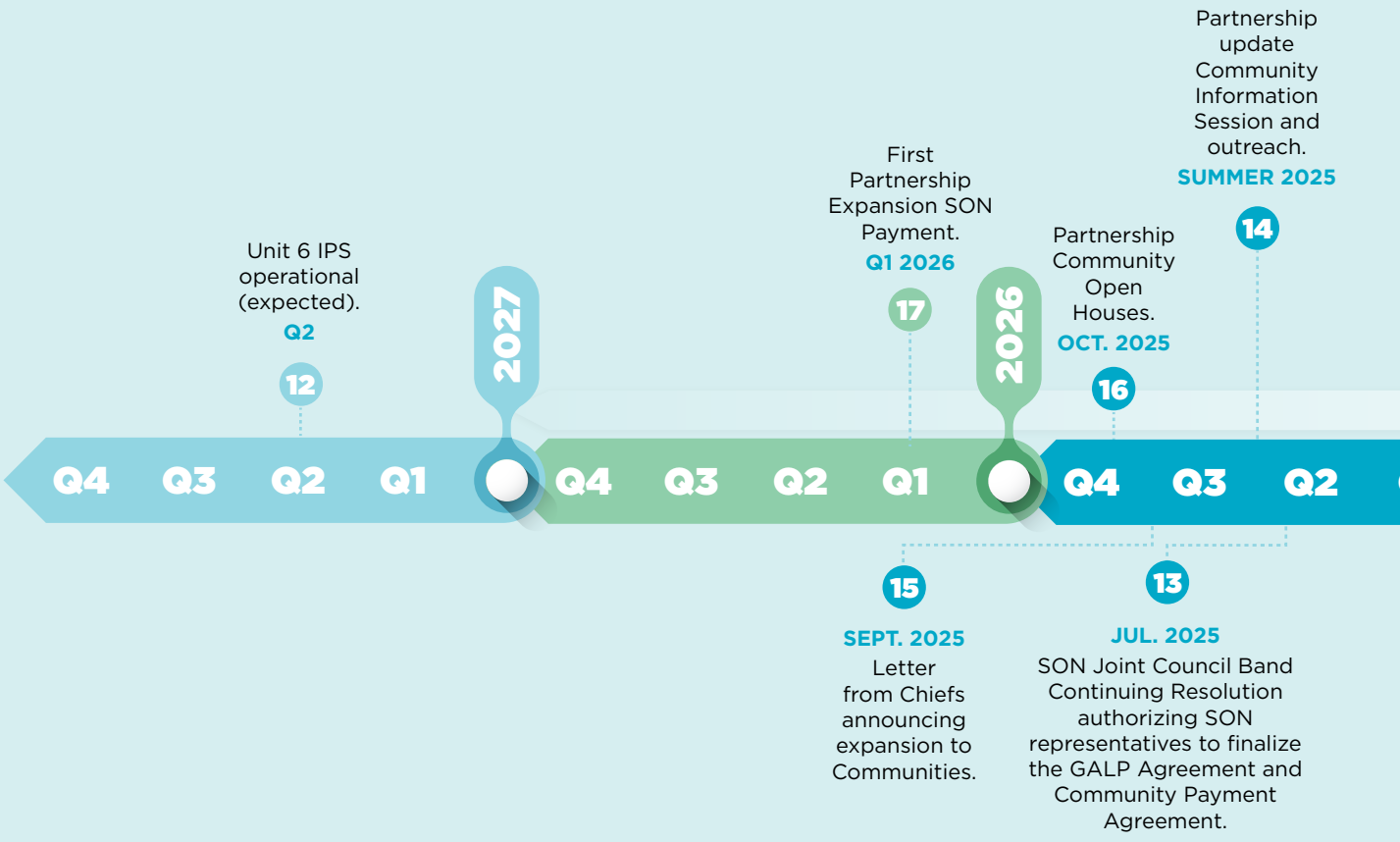
Former Saugeen Chief Lester Anoquot (left), Former Nawash Chief Gregory Nadjiwon (seated left) current Chief Operating Officer and Executive Vice President James Scongack (seated right), and former Bruce Power CEO Mike Rencheck (right) sign the first agreement in 2019.

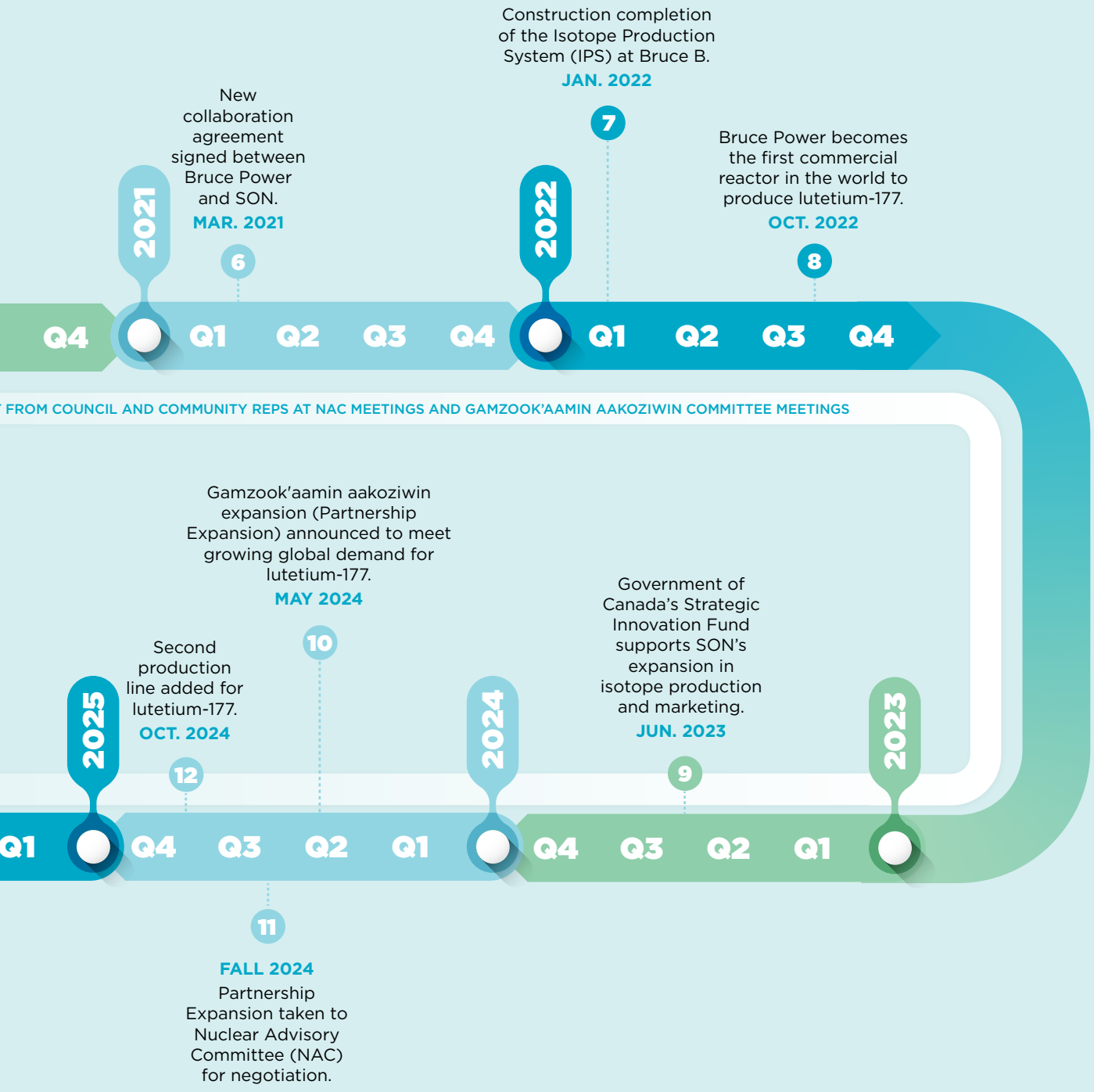


Below: Hon. Stephen Lecce (left), Hon. Lisa Thompson (centre left), Saugeen Chief Conrad Ritchie (centre right), and Bruce Power CEO Eric Chassard (right) announce a new hot cell facility to support the isotope supply chain in 2024.

Partnership timeline



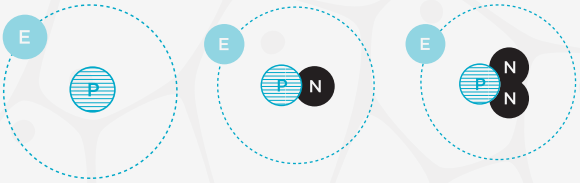



Construction completion of the Isotope Production System (IPS) at Bruce B.
JAN. 2022
7
New collaboration agreement signed between Bruce Power and SON.
MAR. 2021
6
Bruce Power becomes the first commercial reactor in the world to produce lutetium-177.
OCT. 2022
8
2021
2022
Q4
Q1
Q2
Q3
Q4
Q1
Q2
Q3
Q4
FROM COUNCIL AND COMMUNITY REPS AT NAC MEETINGS AND GAMZOOK'AAMIN AAKOZIWIN COMMITTEE MEETINGS
Gamzook'aamin aakoziwin expansion (Partnership Expansion) announced to meet growing global demand for lutetium-177.
MAY 2024
10
Second production line added for lutetium-177.
OCT. 2024
12
Government of Canada's Strategic Innovation Fund supports SON's expansion in isotope production and marketing.
JUN. 2023
9
2025
2024
2023
Q1
Q4
Q3
Q2
Q1
Q4
Q3
Q2
Q1
11
FALL 2024
Partnership Expansion taken to Nuclear Advisory Committee (NAC) for negotiation.

Isotopes 101

Atoms of the same element can have different numbers of neutrons — these are called isotopes. Think of them like siblings: same family (the element), slightly different traits (mass and stability related to number of neutrons).

For example, hydrogren has three isotopes:



Protium
1 proton, 0 neutrons

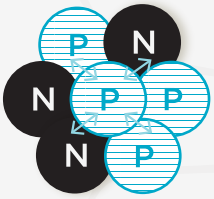
Deuterium
1 proton, 1 neutron

Tritium
1 proton, 2 neutrons

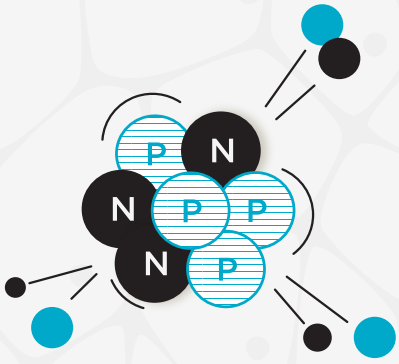
Xenon has 36 known isotopes. Nine of them are stable, and 27 are unstable.

That's a big family!

Isotopes come in two types:



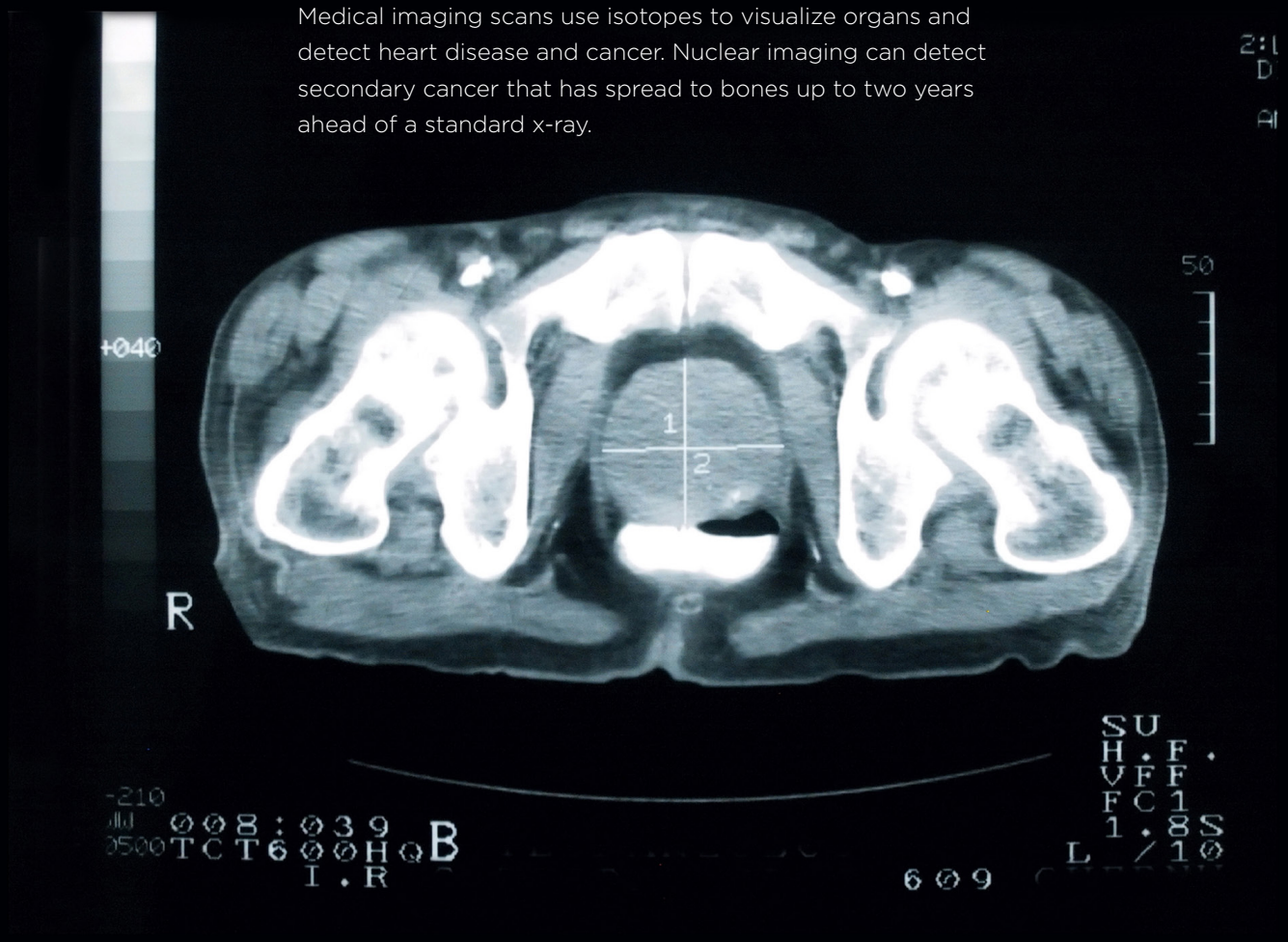
Stable
stay the same over time.



Unstable
(also called radioisotopes) decay and release energy. This energy can be measured and used in medicine and industry.

Medical imaging

Medical imaging scans use isotopes to visualize organs and detect heart disease and cancer. Nuclear imaging can detect secondary cancer that has spread to bones up to two years ahead of a standard x-ray.



Theranostics

The word theranostics is a combination of the words “therapy” and “diagnostics,” and theranostics does just that. Many isotopes including lutetium-177 can be used to both diagnose and treat cancer.

About isotopes production

Isotopes at Bruce Power are produced as part of our process of safely creating electricity (cobalt-60) and also through a dedicated Isotope Production System (lutetium-177).

Isotopes can also be produced on research reactors or in specialized facilities designed for medical and industrial applications. Bruce Power's approach leverages the reliability of "always on" CANDU reactors to produce medical isotopes dependably and with great capacity to scale. This helps meet growing global demand while supporting innovation in cancer treatment and sterilization technologies.

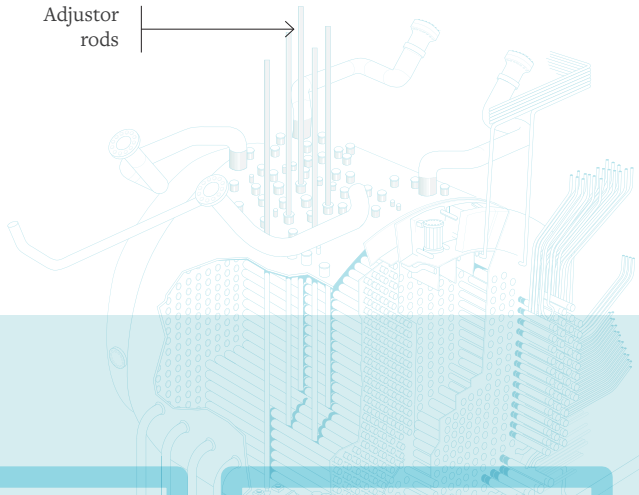
Curious about cobalt-60?

Since 1986, the Bruce Power site on SON Territory has been a consistent, reliable source of cobalt-60, which is essential to the medical community.

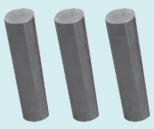
Cobalt-60 sterilizes over 30 per cent of the world's single-use medical equipment such as surgical masks, surgical gowns, syringes and gloves and is also used in cancer treatment.

How it's made

Cobalt-60 does not require the Isotope Production System that was built to produce lutetium-177. Instead, adjustor rods containing cobalt-59 are used as part of Bruce Power's safety systems. These rods are irradiated over 24-36 months in the reactor core and harvested during planned outages.



Cobalt-60 Production



Manufacturer

Plant manufactures cobalt-59 pellets and slugs.

Manufacturer

Plant inserts pellets and slugs into adjusters, which are delivered to reactors.

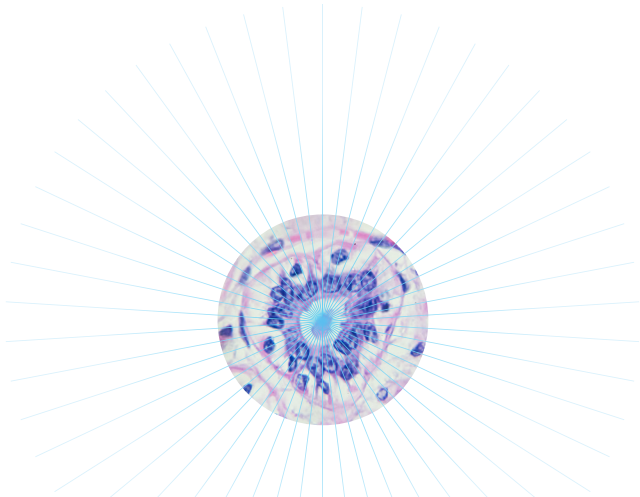
Nuclear Reactor

Adjusters are installed in the reactor core where cobalt-59 is irradiated to become cobalt-60.

During a planned maintenance outage, it is harvested and stored in the secondary fuel bay.

How does cobalt-60 treat cancer?
Cobalt-60 can also be used to treat brain cancer and other abnormalities in the brain. Leksell Gamma Knife® radiosurgery is a type of radiation therapy used to treat tumours and other abnormalities in the brain.

In Gamma Knife® radiosurgery, specialized equipment focuses close to 200 tiny beams of radiation on a tumour or other target. Although each beam has very little effect on the healthy tissue it passes through, a strong dose of radiation is delivered to the site where all the beams meet.



The GammaPod® is a medical device that treats early-stage breast cancer using a special type of radiation. It works with 36 rotating sources of cobalt-60 — a radioactive material that gives off strong gamma rays. Similar to the Gamma Knife®, the rays are aimed precisely at the tumour from different angles, which helps destroy cancer cells while protecting nearby healthy areas like the heart and lungs.

The cobalt-60 is removed from the fuel bay and shipped to the processing facility.

Nordion
A Sotera Health company

Isotope Processor

At the facility, the cobalt-60 is processed into sources for industrial or medical uses.

Global Distribution

The sources are shipped globally.

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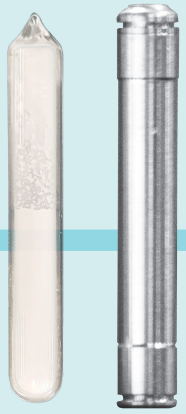
Lu-177 production

Lutetium-177 is a short-lived medical isotope with a half-life of 6.7 days. Lutetium-177 is used in precision oncology for targeted therapy of a growing number of cancers.

The journey from reactor to cancer-fighting remedy involves multiple partners and intricate steps.

Through irradiation, ytterbium-176 decays into lutetium-177. Operators package targets into inserts and shielded containers using the Target Interface Skid (TIS).

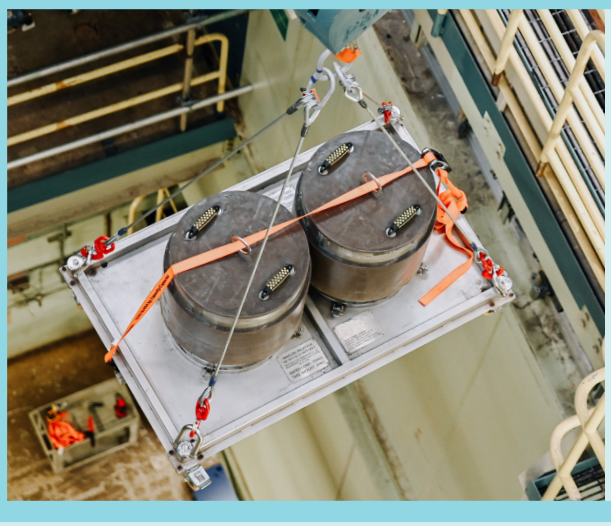


Ytterbium-176 from ITM is sealed in glass ampules and loaded into target carriers by Isogen.

Bruce Power places targets in the shuttling system and verifies serial codes; quantity depends on ITM demand.

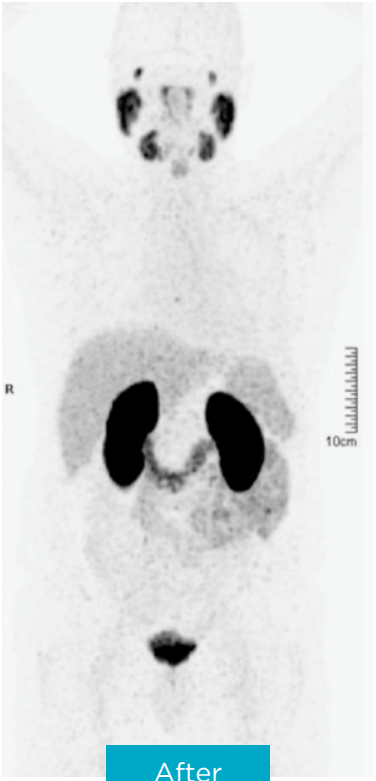
Operators pressure-test, seal, and inspect transport containers for Class VII shipment; empty containers are also prepared.

Trucks deliver to the hot cell; ampules are sent to ITM Germany, who further prepare the lutetium-177 and then deliver it globally.



Shielded containers are craned to the loading area for shipping.

Before



After

How does lutetium-177 treat cancer?
The lutetium-177 produced in the IPS is attached to a targeting molecule in the process of becoming a radiopharmaceutical treatment.

This allows it to target cancer cells and spares healthy tissues, offering a better alternative than standard treatments such as chemotherapy and global radiation for those seeking conventional cancer treatment.

Lutetium-177 has also been approved for use to treat neuroendrocrine tumours (NETs), specifically gastroenteropancreatic neuroendocrine tumours (GEP-NETs). Currently, non-carrier added lutetium-177 produced at Bruce Power is not yet used to treat NETs.

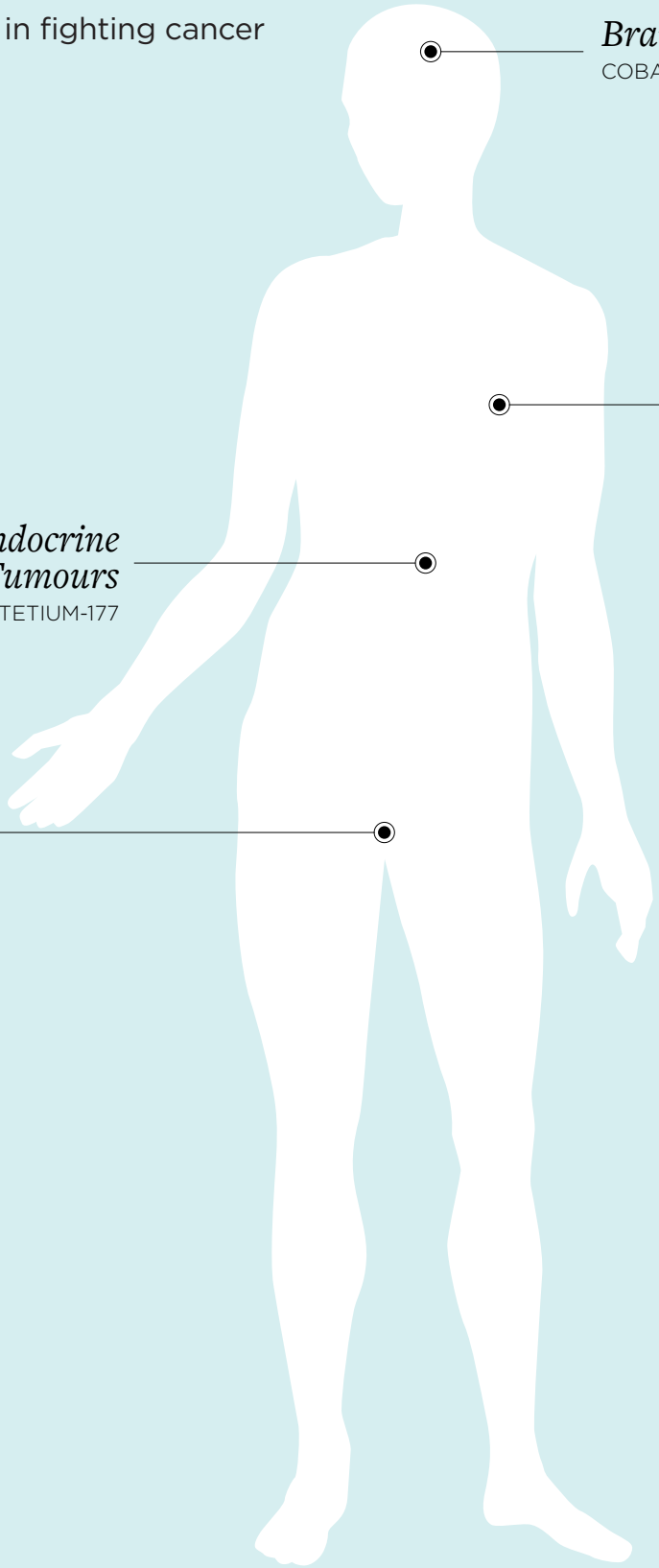
Ontario is the first province in Canada to publicly fund lutetium-177 (Lu-177) cancer treatment.

Starting in January 2025, eligible patients with advanced prostate cancer can access this cancer-fighting therapy through the public health system.

The first publicly funded treatment was provided at London Health Sciences Centre.

The medicine

How isotopes work in fighting cancer



Brain Tumours
COBALT-60

Breast Cancer
COBALT-60

Neuroendocrine Tumours
LUTETIUM-177

Prostate Cancer
LUTETIUM-177

CS250548B-3 R001 JAN2026

Meet the team

It takes a dedicated team to turn nuclear fission into better cancer care and stronger communities. Gamzook'aamin aakoziwin partners and supporters include:

Saugeen Ojibway Nation (SON), encompassing the communities of Neyaashiinigmiing (Chippewas of Nawash Unceded First Nation) and Saugeen (Chippewas of Saugeen First Nation).

Bruce Power, which generates the power needed to irradiate isotopes, operates the Isotope Production System and harvests cobalt-60 during outages.

IsoGen, a joint venture between Kinectrics and Framatome, which designed, manufactured, and installed the Isotope Production System at Bruce Power and supports ongoing lutetium-177 production before and after irradiation.

ITM, headquartered in Germany, ITM produces high-quality radiopharmaceutical isotopes such as no-carrier-added lutetium-177 by irradiating ytterbium-176. ITM distributes its products globally and recycles target materials like ytterbium-176 for reuse in future production cycles.

Nordion, a Canadian company that uses harvested cobalt-60 to sterilize single-use medical equipment — such as surgical masks, gowns, syringes, and gloves — and supplies medical-grade cobalt-60 for cancer treatment through radiation therapy.

The Government of Ontario, which supports the 2025 Partnership Expansion through the Indigenous Opportunities Financing Program administered by the Building Ontario Fund.

The Government of Canada, which provided Strategic Innovation Fund support in 2023 to enable SON's investment.

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"The Gamzook'aamin aakoziwin Partnership Expansion is about putting our people first. Too often, Indigenous communities do not have access to the resources needed to participate in business opportunities of this scale. This time, we've worked hard to make sure the funding is in place and the communities don't have to put up any out-of-pocket costs. It's about creating real opportunities without added burdens or risk to the communities."

Mike Chegahno, Director,
Gamzook'aamin aakoziwin

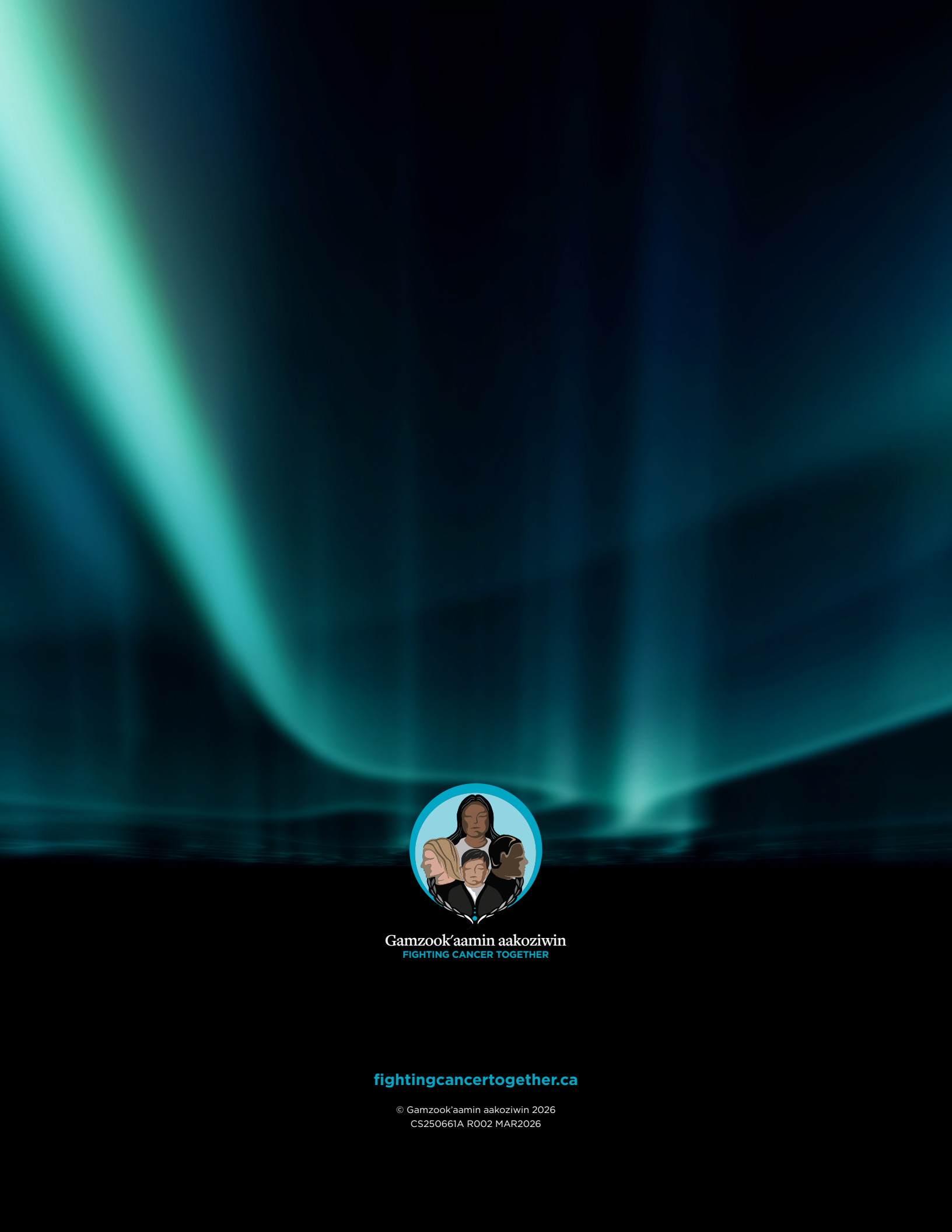
Learn More

Questions or ideas? Feel free to contact Mike Chegahno at mike@fightingcancertogether.ca at any time.

FACEBOOK

INSTAGRAM

Scan the QR codes to follow our journey on social. Learn more at fightingcancertogether.ca



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