Alira Health
Patient-Enabled Solutions™

Navigating the Evolving Global Nuclear Medicine Supply Chain in 2025 and Beyond

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Introduction

Nuclear medicine is at a transformative point, with radioligand therapies (RLTs) and diagnostic radiopharmaceuticals emerging as breakthroughs in oncology and other therapeutic areas. Both biotech and pharmaceutical companies see the potential of targeted radiotherapy for patients and are increasing investment in this industry. However, the success of these technologies hinges on a complex global supply chain now under unprecedented pressure due to shifts in global trade dynamics, infrastructure limitations, and challenges in technological innovation. The recent surge in interest has brought underlying vulnerabilities to light, and manufacturers look for collaborations to scale production to meet demand.

This white paper examines the stages of the radiopharmaceutical supply chain, from raw materials to patient administration. It analyzes how political tensions, cross-border dependencies, and capacity constraints impact each stage. The paper delves into the implications of tariffs and trade barriers on this particularly vulnerable supply chain, and the key market impacts resulting from supply chain challenges. Finally, it outlines a five-part strategy framework for stakeholders to strengthen supply chain resilience, optimize manufacturing networks, and navigate the complex reimbursement landscape.

Stage	Equipment required	HQ US	HQ Canada, EU, Australia
Raw Material Preparation Extraction and purification of precursor materials (e.g., Thorium-232 for Pb-212, Ytterbium-176 for Lu-177, Radium-226 for Ac-225).	> Chemical extraction and purification systems > Shielded containment areas > Radiation detection and monitoring instruments	eichrom, SHINE, NUSANO, NorthStar	ANSTO, Eckert & Ziegler
Target Irradiation Irradiation of target materials in a nuclear reactor or cyclotron to produce desired radioisotopes.	> Nuclear reactors > Cyclotrons > Target handling systems	oranomed	BWXT, SCINTOMICS, COMECER
Radiochemical Processing Separation and purification of the produced radioisotopes from target materials.	> Hot cells with remote handling manipulators > Shielded enclosures > Automated separation systems	Oak Ridge National Laboratory, E Solutions, ABX	Global Morpho Pharma, TEMA Sinergie, itm, Von Gahlen, Ultraray, Norer Shield
Radiolabeling & Quality Control Combining the purified radioisotope with a targeting molecule to form the radiopharmaceutical.	> Radiolabeling synthesis modules > Sterile isolators > Quality control testing equipment > High-performance liquid chromatography (HPLC) systems > Gamma spectrometers > Microbiological testing equipment	SOFIE, LabLogic, Blue Earth	IBA Radio Pharma Solutions, Curium, Trasis, Synthra
Patient Administration Administering the prepared radiopharmaceutical to the patient intravenously.	> Shielded syringes > Infusion pumps > Radiation shielding apparel for medical staff	Radium, Capintec	SWE

Note: Non-exhaustive, there is a potential overlap in the services provided by different players.

Raw Material Preparation: Securing Isotope Feedstocks

Every radiopharmaceutical begins with the preparation of specialized raw materials, often rare isotopes or enriched target materials. This first stage lays the foundation for the entire value chain and has traditionally depended on a limited number of sources and access to reactors in certain countries. Many medical isotopes depend on rare elements or precursors that are unevenly distributed across the globe, creating inherent supply risks.

Trade disruptions, such as export restrictions or new import tariffs, can quickly constrain access to these critical materials, raise the cost of finished therapies, and delay research and development.

To mitigate these risks, the industry is actively pursuing diversification of isotope sourcing. Both governments. and private companies are currently investing in next-generation enrichment technologies and establishing alternative production pathways for stable isotopes, aiming to reduce reliance on traditional, geographically concentrated suppliers.

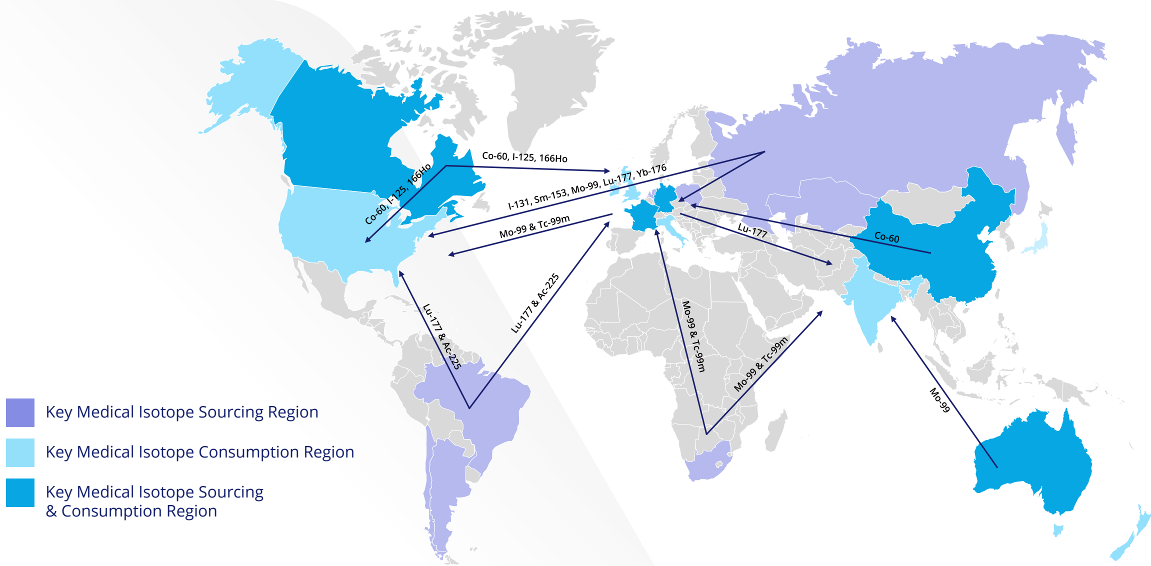
Mo-99, essential for technetium generators, relies on enriched uranium targets traditionally produced by only a few nations. Similarly, Ac-225, a highly promising alpha-emitting isotope, is derived from complex processes like thorium byproduct recovery or proton irradiation of radium, both confined to a limited number of specialized production sites.

Key regions like China have invested heavily in domestic infrastructure to secure isotope supplies, working towards reducing dependence on foreign sources; ensuring a robust upstream supply of raw isotopes is now a priority for these regions from a geopolitical and strategic perspective.

Significant efforts are underway to increase global production of Ac-225, a promising isotope for targeted alpha therapies. Oak Ridge National Laboratory's contractor IsoTek extracted more than fifteen grams of an extremely rare isotope, Th-229, representing a 1,500% increase in the world's supply. In 2024, TerraPower announced that it has enough Th-229 to produce Ac-225 at commercial scale. These developments, supported by collaborations between research institutions and industry partners, are crucial to ensure a reliable and scalable supply of this vital isotope for next-generation radiotherapeutics.

This underscores why securing feedstock supply is essential for any RLT developer or investor evaluating supply chain risk.

Global Medical Isotope Sourcing and Consumption Patterns[1]



Note: [1]Trade patterns are illustrative and non-exhaustive.

Target Irradiation and Isotope Production: Reactor and Accelerator Capacity

The next stage of the value chain is target irradiation, transforming raw materials into radioactive isotopes used in medicine. This typically occurs in nuclear research reactors or high-energy particle accelerators.

For decades, global medical isotope supply has depended heavily on a small number of aging research reactors, particularly in Europe and Canada. Canada's National Research Universal (NRU) reactor, once the source of ~40% of the world's Mo-99, ceased isotope production in 2016 and permanently shut down in 2018. The United States (US), like many other countries, has imported the bulk of its Mo-99 from reactors in the Netherlands, Belgium, and other allied nations due to limited domestic production.

Any unplanned reactor outage or international trade issue can potentially disrupt global supply and if transatlantic shipments become subject to new tariffs or export controls, costs could increase and delivery timelines may be disrupted.

To address these vulnerabilities, the industry is proactively expanding and modernizing irradiation capacity through innovative approaches.

Canadian stakeholders are expanding capacity beyond the traditional European reactor network. Ontario Power Generation's subsidiary, Laurentis Energy Partners, along with BWXT Medical Ltd., has implemented a world-first target delivery system at the Darlington Nuclear Generating Station, enabling Mo-99 production in a commercial power reactor. This Mo-99 will be used to generate Tc-99m, vital for over forty million diagnostic procedures annually. The same target delivery system infrastructure is being prepared to produce Y-90, and there are also plans to expand Lu-177 production as part of a strategic effort to strengthen domestic supply and reduce reliance on aging research reactors.

Similarly, Bruce Power, in partnership with Isogen and ITM, began commercial production of Lu-177 in 2022, marking the world's first use of a commercial power reactor for this purpose. Using an isotope production system installed at Bruce-7, the facility produces Lu-177 for targeted cancer therapies, demonstrating a scalable model for embedding isotope production within nuclear power infrastructure.

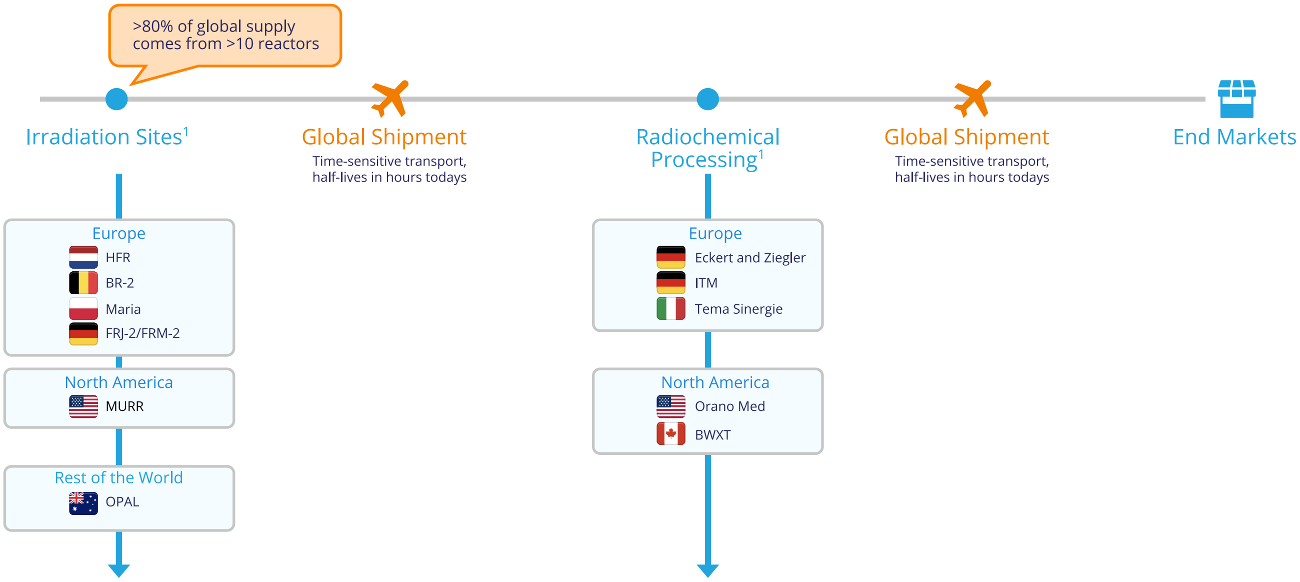
Efforts to establish domestic US Mo-99 production are actively underway. SHINE Technologies and the University of Missouri plan to progress toward commercial output at SHINE Technologies's new facility. While the US remains fully reliant on imports in the interim, these initiatives represent critical steps toward rebuilding a resilient domestic supply chain.

Simultaneously, companies are looking for innovative methods to address the limitations of traditional reactor-based methods. Companies such as SHINE Technologies in the US are pioneering the production of medical isotopes like Lu-177 using innovative particle fusion-driven neutron sources, which enable efficient isotope production without relying on traditional nuclear reactors. This approach offers advantages including reduced radioactive waste, enhanced production flexibility, and lower proliferation risk compared to reactor-based methods.

Many companies are investigating localized production capabilities to further enhance supply resilience (e.g., hospital-based cyclotrons for PET isotopes or generator systems for certain isotopes) to shorten or simplify their supply chain.

While these developments are promising, infrastructure dependencies are likely to persist. Many critical isotopes, especially novel ones like Ac-225, still require reactor irradiation or specialized high-energy accelerators available only in a few countries. The long lead time and regulatory complexity to build new irradiation facilities means short-term shortages remain possible as demand grows. Broadening the base of isotope production through new reactors, public-private partnerships, and innovative accelerators is crucial to meeting the growing needs of RLT developers in a volatile geopolitical climate.

Global Isotope Supply Chain Flowchart



Radiochemical Processing and Synthesis: Bridging Isotopes to Therapies

The transformation of raw radioisotopes into patient-ready radioligand therapies requires a critical intermediate step: refinement and chemical incorporation into pharmaceuticals, where the therapeutic potential of these radioactive materials is fully realized. This radiochemical processing stage involves transporting the isotope from the reactor, purifying it, and then labeling it with a targeting molecule (primarily peptides or small molecules) to create the final radiopharmaceutical. Each step of this stage demands specialized infrastructure, including hot cells and shielded laboratories, and must be executed with urgency to maintain radioactivity yield.

Production constraints are a significant challenge at this stage. A notable example occurred with Novartis's Pluvicto® (lutetium Lu-177 vipivotide tetraxetan) after its approval. Demand quickly outpaced production, leading to supply shortages in 2023. By early 2024, Novartis had brought a new U.S. manufacturing facility online (its fourth site globally) to boost output of Pluvicto. This demonstrated how insufficient processing can hamper therapy roll-out.

Many pharma companies are now prioritizing manufacturing expansion or partnerships with contract development and manufacturing organizations (CDMOs) and technology providers in tandem with clinical development. However, outsourcing is not always the solution as many specialized nuclear CDMOs and technology providers also have limited capacity.

Other constraints in radiochemical processing include limited hot cell capacity and other specialized machinery, as well as a shortage of trained radiochemistry personnel. Short-lived isotopes result in time limits for quality control and release testing. Supply chain coordination between isotope production and processing sites is often difficult and can cause delays.

Another challenge at this stage is that radiopharmaceutical manufacturing must simultaneously satisfy two distinct regulatory frameworks: pharmaceutical regulators such as the Food and Drug Administration or the European Medicines Agency, which oversee drug quality and Good Manufacturing Practice (GMP) standards, and nuclear regulators like the Nuclear Regulatory Commission or their international equivalents, which govern the handling, transport, and safety of radioactive materials. Each country maintains its own licensing systems for radionuclide use and pharmaceutical production, making international scale-up particularly complex. This dual oversight is a key reason why expanding radiopharmaceutical manufacturing into new regions is often slow and operationally demanding.

Distribution and Patient Administration: The Last Mile Challenge

After production and formulation, radiopharmaceuticals face a final hurdle: reaching patients. This «last mile» of distribution and administration is uniquely challenging because of the products' short half-lives and special handling requirements. A delay of even hours can degrade a dose's potency. In extreme cases, a one-day delivery holdup can reduce a radiotherapeutic's activity by ~20% or more, potentially rendering it unusable.

Logistics inherently present additional geographic vulnerabilities. Air freight is the primary mode for intercontinental isotope transport, but this relies on flight routes being open and timely. Events like volcanoes, pandemics, or conflict-related airspace closures can halt shipments. Regional natural disasters can also cut off supply lines, causing potential disruptions at major European airport hubs such as Schiphol in Amsterdam, one of the most important airports for the nuclear research facility in Petten. Industry stakeholders are actively strengthening logistics frameworks through real-time shipment tracking, redundant transportation routes, and strategic onsite stockpiling of short-lived isotopes where feasible.

Distribution of radiopharmaceuticals often relies on a network of nuclear pharmacies and courier services. In the US, for example, centralized radiopharmacy networks such as Cardinal Health play a vital role. Cardinal Health operates numerous radiopharmacies across the country, dispensing unit-dose radiopharmaceuticals in specialized clean rooms. These facilities receive bulk radioactive materials, perform last-step compounding or quality checks, and then dispatch patient-specific doses to nearby clinics. In Europe, many large hospitals have in-house radiopharmacies, while others rely on regional distribution centers (often operated by companies like Curium or AAA/Novartis) to deliver doses daily.

Regional politics heavily influence this last mile. Cross-border shipments of radioisotopes require export/import licenses and must comply with strict regulations for radioactive transport. Trade disruptions can severely impact the radiopharmaceutical supply chain, as demonstrated when Brexit's customs requirements delayed critical UK isotope deliveries. Similar challenges could emerge in the US supply chain if new trade tensions arise with key radioisotope trading partners. Future trade disputes or tariffs could intensify these challenges, forcing costly shipment rerouting and treatment postponements. For patients with aggressive diseases, these are not mere inconveniences; delays or disruptions in radioisotope-based therapies can significantly compromise patient outcomes and treatment efficacy.

To strengthen regional resilience, companies are building more regionalized supply chains with production nodes in each major market to reduce over-reliance on cross-ocean shipping. Joint international efforts are also emerging, such as Belgium's investor-funded expansion of Ac-225 production that benefits stakeholders globally. Nations and companies may forge strategic alliances or trade arrangements to secure isotopes, potentially even bartering different isotopes in the face of tariffs or trade disruptions.

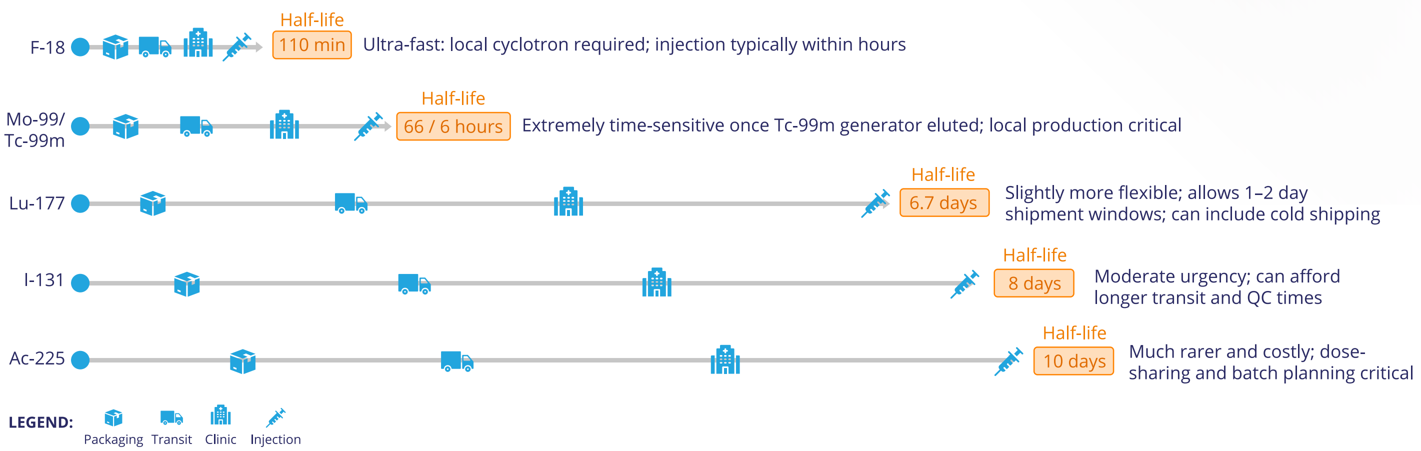
Ultimately, improving resilience will mean reducing one-way dependencies, via domestic capacity building, diversification of supplier bases, and diplomatic coordination to treat medical isotopes as a protected category in trade agreements wherever possible.

Patient administration of RLT also demands specialized capabilities at the clinical site. Only authorized nuclear medicine departments with trained personnel and safety measures can administer these therapies. This means adoption at the hospital level is often slow until infrastructure (shielded infusion rooms, waste handling procedures, staff training) is in place. Reimbursement is intertwined here; without sufficient payment, hospitals may be reluctant to invest in necessary facilities or may limit how many patients they treat.

In the US healthcare system, novel radiotherapeutics administered in outpatient settings require designated reimbursement codes to ensure hospitals receive appropriate compensation for the radiopharmaceutical product, but it does not cover the cost of specialized handling requirements. Without adequate reimbursement mechanisms, healthcare facilities may face challenges in offering these treatments despite their clinical value. Training is another soft barrier: as the use of radiopharmaceuticals expands, there is a need to train more oncologists and nuclear medicine specialists to handle these therapies.

This final segment of the value chain is just as important as the first. Vulnerabilities in distribution or administration logistics can undermine all upstream investments. This last mile is often invisible to investors but is mission-critical to achieve the therapeutic benefit and revenue realization of RLT products.

Timeline of Radiopharmaceutical Dose on Day of Treatment



Spotlight on Tariff and Trade Barriers: Impacts on Cost and Supply Stability

Given the numerous risks that exist in the nuclear medicine supply chain, vulnerability is only increased by rising geopolitical tensions. This section explores the impacts of the trade barriers that could threaten the global radiopharmaceutical supply network and create genuine risk that these critical medical supplies could become collateral damage in trade disputes.

Any tariff or trade barrier imposed on this sector would have three primary effects:

1. **Price volatility:** The supply of isotopes is inelastic in the short term, as production cannot be rapidly ramped up or easily shifted to new locations. If a major supplier is subjected to a tariff, the added cost would be passed along the chain, inflating the price of the isotope and the radiopharmaceutical dose. Given that RLTs are already expensive to produce, even modest cost increases from tariffs could squeeze profit margins or strain healthcare budgets.

2. **Supply disruption:** Unlike typical drugs, one cannot stockpile large quantities of short-lived isotopes; supply disruptions have an almost immediate impact on patients. In scenarios where major trading partners impose reciprocal barriers, radioisotopes or equipment could be swept into controlled items, creating immediate shortages if alternatives are not in place. Although radiopharmaceuticals may receive preferential regulatory treatment because they cannot be stockpiled, as observed during Brexit, persistent delays continue to expose vulnerabilities in the supply chain, posing operational and financial risks for providers and suppliers alike.

3. **Domestic production incentives:** High tariffs or import hassles could encourage more vertical integration and domestic production as a strategic response. If importing isotopes becomes financially or politically unpalatable, large pharma companies and health systems might invest in their own production infrastructure to assure supply.

Proactive industry measures to address these potential disruptions include:

1. **Infrastructure investment:** The US government has funded domestic Mo-99 production projects (such as the one at the University of Missouri) to eliminate reliance on foreign sources, while North American manufacturers are establishing new production facilities to maintain supply continuity. SHINE Technologies and BWXT Medical, among others, are investing to increase production of various RLTs along different steps of the value chain in the US.

2. **Vertical integration:** Several radiotherapeutic developers have secured their own isotope supply lines through joint ventures or acquisitions, creating an internal hedge against trade disruptions. Perspective Therapeutics, Ratio Therapeutics, and Orano Med, among others, are investing in manufacturing plants in the US.

3. **Policy advocacy:** The pharmaceutical industry could advocate for radiopharmaceutical exemption from punitive trade measures (like certain critical medicines). This measure would require a unified voice and clear demonstration of the public health importance of an uninterrupted supply.

For investors and industry leaders, it is important to factor in these macroeconomic variables. Traditional pharmaceutical portfolios may not be heavily impacted by trade barriers, but radiopharmaceuticals are uniquely exposed because of the historic dependency on cross-border material flows and government-controlled facilities.

Key Market Impacts From Supply Chain Challenges

The evolving challenges in the RLT supply chain are driving significant market responses, reshaping industry structure and investment patterns. Three key impacts on the market are pricing, vertical integration, and trends in partnerships.

Pricing volatility and strategy

Radioligand therapies have high development and production costs, and uncertainties in the supply chain inject additional risk into pricing. If isotope costs rise (due to scarcity or trade barriers), companies must decide whether to absorb the costs or pass them on to payers, which could limit adoption. More risk-sharing pricing models or contracting innovations can result. However, there is a limit to what the market will tolerate; payers already scrutinize the high price tags of therapies like Pluvicto. While ongoing supply volatility may prompt healthcare systems to favor treatments with more predictable cost and logistics profiles, it is important to note that for lifesaving radioligand therapies like Pluvicto, proven effective in prostate cancer, payers are unlikely to shift toward alternative treatments solely due to supply concerns. Instead, challenges around pricing and access are typically addressed through mechanisms such as risk-sharing agreements or value-based pricing, rather than abandoning efficacious therapies.

Vertical integration

The most notable industry reaction to supply chain challenges has been a push toward vertical integration. Major pharmaceutical companies are acquiring or partnering with isotope producers, radio-synthesis specialists, and even logistics providers to internalize key supply chain steps. This trend is evident in the flurry of deals in 2023–2024: AstraZeneca's $2 billion acquisition of Fusion Pharma brought it a pipeline of radio conjugates and a new manufacturing base, while Bristol Myers Squibb's $4.1 billion purchase of RayzeBio similarly included a state-of-the-art Ac-225 production site under construction.

The rationale for vertical integration is clear: control and reliability. By owning more of the supply chain, companies can better ensure quality, secure supply, and potentially achieve cost efficiencies through scale. From an investor perspective, firms that are vertically integrated may be seen as de-risked relative to those relying on patchwork of third parties for critical inputs. On the other hand, integration is capital-intensive, which divides the field into haves and have-nots.

Partnership and collaboration trends

In addition to vertical deals, the pressures have catalyzed broader collaboration. We see isotope suppliers scaling up with new funding (e.g., Belgium's PanTera securing €134 million to expand Ac-225 production), often with implicit backing from pharma clients. Licensing deals are bringing together expertise across continents, such as the 2024 alliance where Sanofi partnered with US-based RadioMedix and France's Orano Med to develop new RLTs. These multi-party deals marry the pieces of RLT development in a more integrated way.

An implication of this trend is that it may raise competitive barriers to entry. If a handful of large players lock up isotope supply and have extensive manufacturing networks, smaller innovators might find it difficult to get their candidates to market unless they ally with those majors. This could slow innovation unless carefully managed, or it could spur the next generation of innovators to focus on platform solutions that big players will want to license or buy.

Strategies for Building a Resilient Radiopharmaceuticals Supply Chain

Considering ongoing supply chain volatility and complexity, stakeholders across the radiopharmaceutical ecosystem must build supply chains that are not only efficient but also adaptable and resilient. Below is a five-part strategy framework designed to help companies future-proof their operations and maintain continuity amid regulatory, geopolitical, and logistical disruptions.

Diversify sourcing

Avoid reliance on single suppliers or geographies for key isotopes. Companies should proactively qualify multiple sources, ideally across different continents, and consider alternatives that can be manufactured in-house or through modular technologies. Isotope choice should be evaluated alongside clinical strategy, not after the fact. Strategic partnerships with emerging producers and support for public isotope programs can further mitigate risk.

Expand redundancy

Redundancy should be built into manufacturing and distribution networks. Dual-site production (e.g., North America and Europe), modular facilities, and backup transport routes offer operational insurance. Companies should also maintain inventory buffers for long-lived precursor materials and secure multi-carrier logistics plans. Flexibility in manufacturing design allows for adaptation to shifting isotope needs or demand surges.

Integrate selectively

Control of critical supply chain nodes, whether through acquisition, internal buildout, or co-investment, is key to resilience. Larger pharma players may opt for full integration, while smaller companies can leverage joint ventures or strategic partnerships. Supply chain mapping should identify “must-own” versus “must-partner” elements, including CDMOs, distributors, and even hospital networks where applicable.

Engage regulators early

Reimbursement and trade policy are not downstream concerns; they must shape development plans. Early dialogue with payers, regulators, and HTA bodies ensures smoother market access. Companies should pursue special reimbursement designations, contribute real-world evidence, and advocate through industry coalitions for supportive trade and subsidy frameworks.

Train and monitor continuously

Operational excellence underpins resilience. Ensure frontline staff, from logistics teams to hospital technicians, are trained in handling radiopharmaceuticals. Simulations and best practice sharing can prevent minor issues from becoming systemic failures. Real-time supply chain monitoring and predictive analytics help anticipate and mitigate disruptions. External advisory support can add value by pressure-testing plans and identifying hidden risks.

Companies that embed resilience as a core capability, rather than a crisis response, will be best positioned to lead in the growing RLT market. Supply chain strength is emerging as a differentiator on par with intellectual property and clinical results.

Conclusion

Nuclear medicine today is propelled by scientific breakthroughs and growing investment as companies perceive the potential value to patients of these cutting-edge therapies for cancers and other diseases. But the future of this promising sector hinges on the industry's ability to deliver these therapies consistently and at scale.

The production and delivery of radiopharmaceuticals is a global enterprise, which creates inherent risk. It is also rife with technical challenges, including unique constraints and challenges in access to raw materials, requirements of production and processing, and the logistics of distribution and patient administration. The added pressure of geopolitical tensions and potential barriers to trade between countries and regions makes this a critical time for companies who seek to grow in this promising clinical area. Nuclear medicine is uniquely exposed because of its historic dependency on cross-border material flows and government-controlled facilities. Tariffs and trade barriers act as a new pressure test on the supply chain, forcing stakeholders to weigh the cost of global interdependence against the capital expense of localization.

Supply chain strategy is a core part of RLT development and should be treated as vital as clinical and regulatory strategy. In fact, supply chain resilience has become a strategic imperative. Companies that build robust sourcing, manufacturing, and distribution networks will define the pace and scope of impact in this rapidly evolving space. In a field shaped by geopolitical uncertainty, limited isotope production centers, and regulatory complexity, operational agility is as critical as clinical innovation.

Meanwhile, the market is adjusting to supply chain realities: pricing models will adapt, ownership structures are shifting towards more integration, and M&A activity is robust. For stakeholders, strategic planning around partnerships and supply chain integration is now as important as science itself. Investors should conduct due diligence not just on a company's compounds, but also its supply chain strategy. The clear takeaway is that supply security and scalability are driving business decisions in this sector like never before.

For those developing or investing in RLTs, now is the time to ensure that plans for sourcing, manufacturing, distribution, and market access are as well-developed as the clinical plan. This white paper has mapped a critical strategic framework to address challenges in nuclear medicine's transformative era. By proactively aligning with the value chain's evolution and implementing targeted strategies that fuse science with supply chain foresight, organizations can transcend risk mitigation into long-term competitive advantage and ensure that life-saving therapies reach patients without delay.

Success in this complex landscape demands more than technical prowess. It requires a strategic compass forged through cross-disciplinary mastery, blending nuclear science, supply chain resilience, and healthcare economics.

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Piergiulio Lauriano advises top Fortune 500, private equity, and promising early-stage companies at the intersection of medical care and technology. He provides executive guidance on corporate strategy, portfolio innovation and prioritization, business planning, organic/inorganic growth, and diligence for pharma, medtech, healthcare providers, and health tech verticals.

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Florent Chouvy has extensive horizontal experience supporting companies on multiple assignment types, including commercial due diligence, opportunity assessment, company and asset valuation, corporate/growth strategy, and health economics and outcomes research. Florent's areas of expertise include oncology, especially in nuclear medicine relative to both diagnostic and therapeutic applications and in immuno-oncology across main solid tumors; central nervous system disorders; medical imaging; and sports medicine. Prior to joining Alira Health, he worked on merges and acquisition projects for Segula Technologies, an international engineering company, investigating French and cross-border deal opportunities. Florent graduated from Audencia Business School holding a Grande Ecole Master in Management, majoring in corporate finance.

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Sahil holds a degree in mechanical engineering from YMCA in India, providing a technical foundation. Furthermore, he holds an MBA in international strategy from EMLyon Business School in France, underscoring his expertise in strategic thinking within the global business landscape.

About Alira Health

From manufacturing and logistics to clinical and commercial positioning in the US, EU, and APAC markets, we help our clients navigate every step with precision. The development of radiopharmaceutical solutions, whether for diagnostics or therapeutics, is full of challenges. Companies must navigate diverse regulatory landscapes, a complex payer environment with high prices and cost pressures, and varying levels of nuclear medicine maturity across geographies. Our team can accompany you on this complex development journey. We understand each step; from choosing the relevant regulatory pathway to delineating the reimbursement landscape and determining optimal clinical and competitive positioning of your product.

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Why Partner With Us?

- A comprehensive understanding of the value chain: isotope sourcing/production, radiolabeling/synthesis, distribution, administration
- A coverage of the different nuclear medicine players, from isotope suppliers to biopharma/ pharma, CDMOs, radiopharmacies, or service/logistics providers
- Unique service expertise that spans across the value chain, from CMC to market access, including regulatory services and strategy consulting
- An extensive track record of over 30 projects in nuclear medicine over the last 5 years, supporting from smaller research-driven players to industry-leading radiopharmaceutical companies