

A WHITEPAPER FROM INSTITUTE@PRECISION

Challenges and Opportunities for Radiopharmaceutical Commercialization

Strategic guidance for navigating an emerging market

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The Institute@Precision is part of Precision Medicine Group, an organization purpose-built for precision with services spanning discovery to commercialization.





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Executive Summary

The radiopharmaceutical industry is growing rapidly, driven by validated oncology applications, expanding diagnostic and therapeutic use beyond traditional niches, and growing investment.

However, radiopharmaceutical commercialization has added complexity compared to other therapeutic modalities, with additional operational, regulatory, and supply considerations that must be addressed in parallel. Failure to manage these complexities can delay launch, restrict access, and limit commercial performance.

This whitepaper examines the challenges specific to radiopharmaceuticals and provides strategic insights to support successful commercialization.

The evolving radiopharmaceutical commercialization landscape

The radiopharmaceutical commercialization landscape has shifted rapidly in recent years, with positive proof points from clinical and commercial validation triggering capital, mergers and acquisitions, and expanded pipelines. Several 2026 announcements illustrate this pace: Aktis Oncology, for instance, reported raising \$318 million in gross proceeds after exceeding its IPO forecast, and Novartis signaled continued commitment through plans for a new radiopharmaceutical plant in Florida alongside a \$50 million licensing transaction for a peptide-based radiopharmaceutical asset from Zonsen PepLib Biotech Inc.¹⁻³

Oncology remains the commercial center of gravity, driven in large part by theranostic approaches that pair diagnostic imaging with targeted radionuclide therapy through a shared molecular target, enabling physicians to identify patients most likely to benefit from treatment and monitor response. FDA-approved therapies such as PLUVICTO® and LUTATHERA® (the therapeutic components of established theranostic pairs) exemplify this model. At the same time, the opportunity set has widened beyond oncology programs. Diagnostic radiopharmaceuticals are also gaining traction in neurology, supported by commercially available PET radiotracers for conditions including Alzheimer's disease and Parkinson's disease.⁴

Growth, however, has not reduced the difficulty of commercialization. Indeed, the radiopharmaceutical value chain introduces greater complexity and interdependence than most traditional pharmaceuticals, and the time-sensitive nature of radioactive agents imposes distribution and logistics constraints that do not exist in conventional drug supply chains. Those operational realities often collide with limited nuclear medicine expertise and biopharma industry experience among both providers and payers.⁵

As competition intensifies for scarce expertise, clinical sites, and manufacturing and distribution capacity, commercial plans built on the assumption that "if approved, it will be adopted" become increasingly fragile. Failure to resolve logistics, reimbursement, and capacity barriers will delay adoption, even in National Comprehensive Cancer Network® (NCCN®)-supported indications. Because of this, biopharma companies need commercialization strategies that explicitly account for radiopharmaceutical-specific constraints.

This whitepaper draws on more than 100 years of combined oncology experience to explore the stakeholder landscape, reimbursement complexity, and logistical challenges unique to radiopharmaceuticals, and provide strategic insights to aid biopharma companies in successful commercialization.

The added complexity of the radiopharmaceutical commercial value chain

The radiopharmaceutical commercial value chain differs from that of traditional pharmaceutical models, with additional layers of complexity across scientific, regulatory, operational, and reimbursement domains.

Radioactivity considerations

Radiopharmaceuticals require additional considerations specific to the use of radioactive isotopes, including approval from radioactive materials authorities, which operate under different timelines, inspection standards, and documentation requirements than drug regulators. Depending on the region, this can entail dual or triple regulatory submissions.

For a deeper dive into the global regulatory landscape for radiopharmaceuticals, download our whitepaper:

Navigating Global Regulations for Radiopharmaceutical Development – Understanding regional requirements, gaps, and practical implications across the US, EU, and APAC.

To meet these additional regulatory requirements, radiopharmaceuticals require specialized manufacturing and handling protocols, such as tightly controlled production schedules, validated transport pathways, cold-chain continuity, and radiation safety. This complexity continues at delivery sites, where radiopharmaceuticals require greater site readiness and infrastructure, including hot labs, radiation shielding, specialized storage, dosimetry tools, and certified nuclear medicine personnel.

Radiopharmaceutical value chain stakeholders

The production and handling of radioactive material can change or increase the number of stakeholders biopharma companies must account for across the value chain. The stakeholders are summarized in Table 1 along with key considerations for biopharma companies to successfully engage with them.

Stakeholder	Responsibilities	Key considerations for successful engagement
Nuclear Medicine Departments	Core administrators of diagnostic and therapeutic radiopharmaceuticals	<ul style="list-style-type: none"> Function as both clinical gatekeepers and economic stakeholders whose constraints directly determine market access Sensitive to scheduling failures that can lead to dose loss, major revenue loss, and patient rescheduling delays Often face staff shortages, which constrain capacity (ANPs, RSOs, physicists) High capital requirements and competition for space with imaging and oncology units
Nuclear Medicine Pharmacists	Oversight of radiopharmaceutical preparation and release, translating regulatory and manufacturer requirements into clinical workflows	<ul style="list-style-type: none"> Primary clinical and regulatory gatekeepers for formulary inclusion and first use, especially for novel therapeutic radiopharmaceuticals Highly sensitive to preparation complexity, dose accuracy, and failure risk, requiring early manufacturer support on workflows, stability, and exception handling
Radiation Safety Officers (RSOs)	Ensure compliance with radiation protection, storage, and disposal	<ul style="list-style-type: none"> Gatekeepers for product adoption; evaluating shielding, storage, contamination protocols, and waste decay handling Require detailed manufacturer documentation



Physicists	Dosimetry, imaging protocols, and therapy calculations	<ul style="list-style-type: none"> • Participate in evaluating whether the provider organization can support new therapeutic workflows • Often indirectly influence purchasing and adoption decisions
Medical & Radiation Oncologists	Care planning, treatment sequencing, and referrals	<ul style="list-style-type: none"> • Require clarity on positioning vs. systemic therapy • Must understand pre- and post-treatment requirements (e.g., supportive medications)
Billing, Authorization, and Patient Support Staff	Manage prior authorization, billing, and patient assistance to enable timely treatment initiation and reimbursement	<ul style="list-style-type: none"> • Highly sensitive to coding complexity, wastage rules, and site-of-care reimbursement nuances, particularly for high-cost therapeutic radiopharmaceuticals • Require clear manufacturer support on coding, PA templates, and patient assistance pathways to minimize treatment delays and financial exposure
Hospital & Provider Organization Executives	Capital allocation and risk tolerance decisions	<ul style="list-style-type: none"> • Gatekeepers for site infrastructure upgrades, including hot labs, PET scanners, and staffing • Sensitive to reimbursement predictability and operational volatility
Buyers / Supply Chain Management	Procurement and inventory management	<ul style="list-style-type: none"> • Must manage just-in-time delivery with little margin for error • Limited ability to stock/hold product due to shelf life • Need reliability guarantees (or penalty protections) from manufacturers • Depend on carrier performance and radiation-certified logistics pathways
Group Purchasing Organizations (GPOs)	Contracting and price negotiation, ensuring reliable supply and distribution, and vetting manufacturer compliance with quality and regulatory standards	<ul style="list-style-type: none"> • Gatekeepers for product adoption based on supplier ability to manage logistics and supply chain disruptions • Participate in contract negotiations • Indirectly influence purchasing decisions by developing educational materials to keep members informed of new radiopharmaceuticals • Increasingly influence evidence expectations for high-cost radiotherapeutics
Payers	Determine coverage, develop medical policy, and set reimbursement levels	<ul style="list-style-type: none"> • Influence purchasing decisions based on pressure from clients to manage oncology drug spend and scrutinize high-cost therapies with limited long-term survival data • Require support on coding/billing, site-of-care, wastage policies, and diagnostic vs therapeutic reimbursement methodology
Radiopharmaceutical Benefit Managers (RBMs)	Contracted by health plans to manage radiopharmaceutical benefits (formulary, policy, UM)	<ul style="list-style-type: none"> • Behave like a hybrid of PBMs + UM vendors, but with network steering power (COEs, credentialing requirements) • Push for value-based contracts tied to treatment completion or imaging accuracy • Focus on utilization management and provider appropriateness

Table 1: Overview of radiopharmaceutical commercial value chain stakeholders

Variations across provider organizations

Key stakeholders across the value chain can vary depending on the provider organization, particularly when comparing large institutions to community practices. For example, very few community practice organizations have a nuclear pharmaceutical department, and the majority of their radioactive materials are managed by the radiation oncology department, whereas in institutions, the split between radiation oncology and nuclear pharmaceutical departments is much more even (Figure 1).

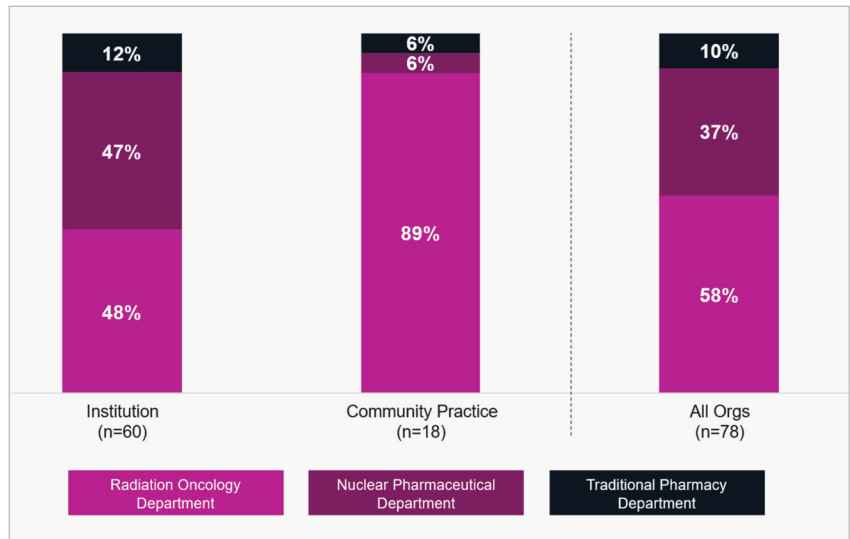


Figure 1: Departments dispensing radiopharmaceuticals across institutions and community practices. Internal primary research data collected Mar-Apr 2025. Responses do not add up to 100% due to the multi-select format.

Similar patterns can be seen in radiopharmaceutical prescribing. While the bulk of radiopharmaceutical ordering is done by radiation oncologists, in community practice, general oncologists prescribe a significant proportion, whereas in institutions, genito-urinary subspecialized oncologists prescribe more than 40% of the time (Figure 2).

To ensure access to these highly specialized therapies, it is vital to understand the organization-specific radiopharmaceutical stakeholders and how communication can be leveraged both within and between those teams.

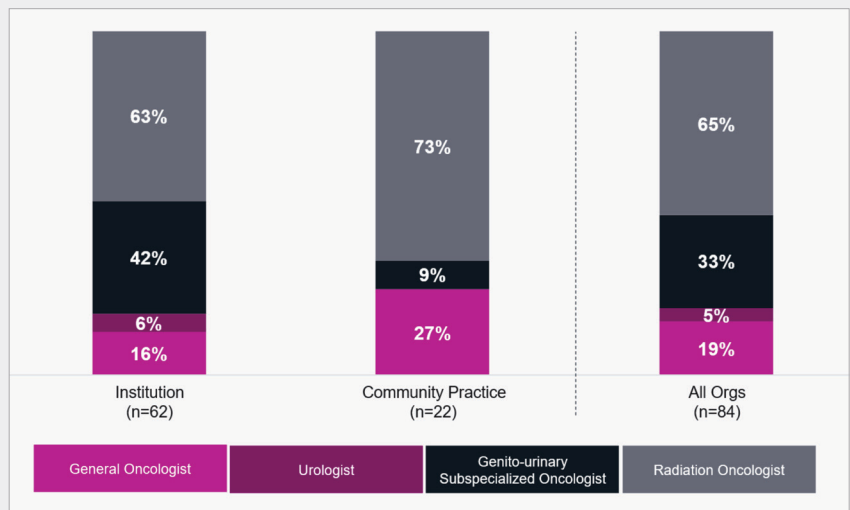


Figure 2: Roles prescribing radiopharmaceuticals across institutions and community practices. Internal primary research data collected Mar-Apr 2025. Responses do not add up to 100% due to the multi-select format.



Increased dependency

On top of the increased structural complexity of the value chain, radiopharmaceuticals introduce additional dependencies among stakeholders, driven by the time-sensitive nature of radioisotopes as well as the narrow ecosystem of suppliers and providers equipped to handle radioactive products.

Upstream supply

Since manufacturers rely on a small number of isotope suppliers, upstream disruption can halt therapy availability at a national level, directly affecting production schedules, market expansion, and reliability commitments to provider organizations and payers.

Payer-provider-manufacturer coordination

Downstream, success depends on the multidisciplinary capabilities of providers and tight payer-provider-manufacturer coordination. Because dosing is time-sensitive, manufacturers must work more closely with payers and sites to ensure rapid prior authorization, appeals support, and reimbursement clarity, as any delays threaten the viability of the dose.

Provider organization investment

Adoption further depends on significant investment by provider organizations in infrastructure, staffing, and compliance. Manufacturers must support this build-out through economic modeling, safety compliance resources, operational playbooks, and reimbursement education to enable sustained program growth.

Implications for biopharma companies

Due to the added layers of complexity across the value chain, radiopharmaceutical commercialization requires greater coordination than traditional pharmaceutical launches. As such, biopharma companies must combine commercialization capability with radiopharmaceutical-specific expertise to manage interdependencies across manufacturing, regulation, logistics, reimbursement, and site readiness.

Reimbursement and coding realities

While many elements of radiopharmaceutical reimbursement and coding align with those of traditional physician-administered drugs, structural differences across therapeutics, diagnostics, and theranostics create complexity that can directly affect radiopharmaceutical adoption.

Therapeutics

Therapeutic radiopharmaceuticals are treated similarly to other physician-administered drugs, with reimbursement separate from procedure payment. Once permanent codes are established, reimbursement typically follows an average sales price (ASP)-based methodology, providing a clear, predictable pathway that supports the adoption of novel radiotherapeutics in oncology and other indications.

Diagnostics

Historically, diagnostic radiopharmaceuticals were bundled into imaging procedure payments, which did not reflect the cost of higher-value diagnostic agents and created a barrier to adoption. However, a significant policy shift in the 2025 Hospital Outpatient Prospective Payment System (OPPS) Final Rule altered this framework, as the Centers for Medicare & Medicaid Services (CMS) introduced separate payment for certain high-cost diagnostic radiopharmaceuticals, with agents exceeding a mean unit cost (MUC) of \$630 per day now eligible for separate reimbursement from the imaging procedure.⁶

This change aims to improve transparency and align reimbursement more closely with acquisition cost for innovative agents. However, MUC is derived from claims data rather than manufacturer pricing, so community sites with lower claims volume often struggle to generate sufficient data to raise their calculated MUC, resulting in persistent underpayment and reduced incentive to adopt.

Theranostics

Theranostics combines elements of both diagnostic and therapeutic reimbursement structures, so programs frequently include additional personalized dosimetry costs and may also require concurrent payer approvals for both the diagnostic and therapeutic components. Consequently, misalignment between coverage policies, utilization management requirements, and benefit design across diagnostic and therapeutic pathways can lead to treatment delays.

Coding and Administrative Barriers

Even where coverage intent is clear, coding and administrative realities can create friction. For example, newly approved therapeutic radiopharmaceuticals often experience a 3–6-month delay before receiving a permanent Healthcare Common Procedure Coding System (HCPCS) code, which is foundational for reimbursement under medical benefits by Medicare and most commercial payers.

During the interim period, providers may face uncertainty in claims submission, delayed payment processing,

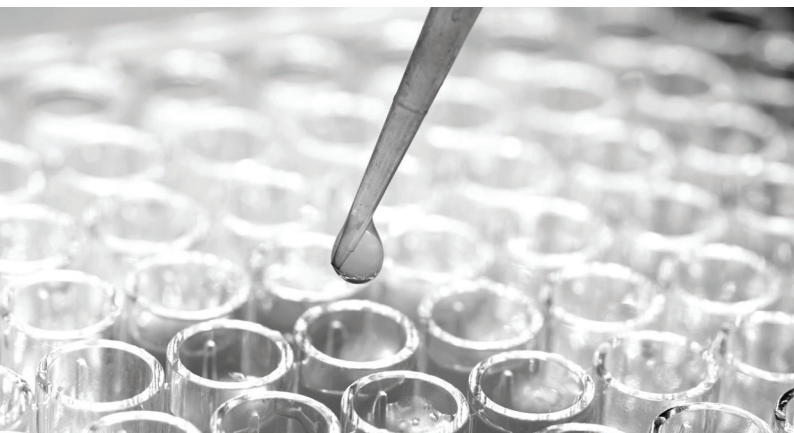
and inconsistent implementation of payer policies. Such administrative hurdles can create temporary access barriers for patients, particularly in settings where providers are unable or unwilling to bear the financial risk of using a product without assured reimbursement.

Operational systems also introduce constraints. EHR configuration, scheduling workflows, pharmacy systems, and billing processes can become silent failure points and challenges that are more pronounced in less experienced sites and thus increase reliance on manufacturer support.

As more agents become available within the same indication, payers are expected to increase scrutiny to monitor for market crowding and clinical value redundancy. Increased scrutiny will particularly affect high-expenditure therapeutic areas such as oncology, where payers face mounting pressure to balance cost containment with uninterrupted patient access. Additionally, significant pricing variability across agents targeting similar populations is likely to prompt payers to consider tighter utilization management, including formulary preferences, indication-specific coverage policies, or value-based contracting models.

Implications for biopharma companies

In large academic centers and experienced payer environments, reimbursement processes are likely to function smoothly. However, biopharma companies should anticipate that smaller or less experienced providers will depend on structured education, practical billing support, and sustained engagement to navigate complexity and enable adoption. Therefore, biopharma companies must treat the reimbursement strategy as an operational priority and provide clear, comprehensive guidance to providers and payers on coding, billing, and coverage pathways.



Supply chain, manufacturing, and site logistics coordination

As noted earlier, radiopharmaceutical supply chains have increased dependencies due to the short half-lives of radioisotopes and the limited number of suppliers, making them time-bound and operationally fragile. As such, radiopharmaceuticals require precise coordination from manufacturing through to delivery and administration, with production schedules, transport routes, and site readiness aligned in real time. Geographic location also directly affects delivery feasibility, as delivery windows are narrow and not all sites are within a viable transport range. This can lead to repeated delivery failures, prompting providers to seek contractual safeguards, such as credits or oversight of waste protection.

Alpha-emitters and theranostic approaches introduce additional constraints. Fewer sites are licensed to handle alpha-emitting agents, and handling requirements are more stringent, limiting site availability and concentrating demand within a small network.

For theranostics, linking imaging and treatment delivery means that imaging and therapeutic workflows cannot be managed independently, increasing parallel demand on imaging capacity, site infrastructure, and trained personnel.

Implications for biopharma companies

Biopharma companies must ensure supply chain and manufacturing excellence prior to launch, as early operational failures will damage long-term adoption more than delayed launches. Teams should, therefore, invest time and capital across manufacturing, logistics, and site coordination to fully build out their program and prepare to absorb or share the risk associated with missed doses through credits, replenishment policies, or structured risk-sharing arrangements.

Time sensitivity and operational risk

Because radiopharmaceutical doses are manufactured to order and decay rapidly, small disruptions have outsized consequences. Weather events, transportation delays, patient illness, or scheduling breakdowns, for example, can all invalidate a dose. Naturally, the risks are compounded for smaller providers with limited ability to absorb financial losses, and for those in rural areas, where logistical challenges for patients may lead them to abandon the therapy option.

Mitigating these heightened risks is crucial, as sites that experience repeated delivery failures will switch to alternative manufacturers and rarely return. Early radiopharmaceutical launches benefited from limited competition, preventing such switches, but, as the number of drugs on the market grows, this will no longer be the case. As such, manufacturing delays could cause irreversible brand damage, and reliability will become a key differentiator for market standing.



A strategic framework for successful radiopharmaceutical commercialization

Traditional launch models do not account for the structural complexity of radiopharmaceutical programs. Standard oncology playbooks, for example, assume stockable products, broad site readiness, and linear access pathways, which are not applicable to radiopharmaceuticals.

Accordingly, biopharma companies need a well-structured radiopharmaceutical-specific launch framework. Without one, risks compound, with clinical, commercial, and supply

decisions becoming misaligned and the consequences surfacing late in the launch cycle. Such a scenario ultimately increases the burden on providers and reduces their willingness to adopt.

The framework below provides a top-level overview of the key pillars for a successful radiopharmaceutical commercialization strategy.

Strategic framework

Pillar 1: Integrated clinical–commercial planning

It is essential to integrate clinical positioning, operational feasibility, and financial impact from the outset. As such, biopharma companies must:

- Clearly define a differentiated value beyond “first to market”
- Develop integrated value messaging across clinical, operational, and financial stakeholders that can be adapted to reflect different provider organizational structures
- Invest in specialized field force capabilities with expertise in theranostics and radiopharmaceutical-specific challenges that affect provider choice and patient treatment
- Prepare for risk-sharing or value-based arrangements between manufacturers, providers, and payers, including models tied to treatment delivery, real-world outcomes, or therapy utilization

Pillar 2: Reimbursement and coding design

To ensure a proactive and continuously updated reimbursement strategy, biopharma companies must:

- Explore how Group Purchasing Organizations (GPOs) are contracting radiopharmaceuticals and the implications this has on the cost and availability of the product
- Keep up to date with any reimbursement or coding changes as they move toward commercialization
- Provide proper education and guidance to payors and providers so they can easily navigate reimbursement and coding
- Build payer-facing tools that translate provider operational complexity into reimbursement, utilization management, and site-of-care decisions, including dose perishability, staffing constraints, site readiness variability, and real-world delivery risk. This may include:
 - Operational journey maps that illustrate end-to-end radiopharmaceutical delivery failure points that drive dose loss and rescheduling
 - Site-readiness stratification frameworks that differentiate academic centers, Integrated Delivery Networks (IDNs), and community practices by infrastructure
 - Economic impact models that quantify the downstream costs of delays, canceled doses, or restrictive utilization management policies



Pillar 3: Supply chain and logistics coordination

It is critical for biopharma companies to align their commercial strategy with operational feasibility. To achieve this, they should:

- Engage early (12 months pre-launch) with imaging networks, distributors, prescribers, and nuclear medicine or radiational oncology gatekeepers to align on anticipated demand, workflow changes, licensing requirements, and capacity constraints
- Align commercial and supply chain teams around realistic delivery capabilities, including manufacturer cadence, geographic delivery limits, site throughput, and tolerance for missed or delayed doses, to avoid overpromising access that cannot be operationally sustained
- Systematically map geographic constraints and plan market expansion accordingly, accounting for isotope half-life, transportation windows, carrier certification, weather risk, and site proximity to manufacturing or distribution hubs

Pillar 4: Provider enablement and site-of-care strategy

Since radiopharmaceutical adoption depends on provider readiness, biopharma companies must commit to a partnership rather than a simple transactional engagement, by:

- Preparing for capital planning discussions within provider organizations, including those around imaging and infrastructure readiness
- Establishing best practices for integrating radiopharmaceuticals into sites without existing hot lab capacity
- Considering how organizations that are not currently administering radiopharmaceuticals might enter into the space and develop appropriate support resources
- Engaging with sites early, as onboarding a new site can take a year or more

Supporting radiopharmaceutical delivery in community practice

Due to high setup costs, smaller sites, such as community practices, generally operate without a dedicated hot lab. The impact of this can already be seen, with Lutathera and Pluvicto largely delivered in patient rooms, sometimes even in those used for other purposes (Figure 3). As community practices build their own delivery models, biopharma companies should support these efforts with practical tools, workflow guidance, and operational education to reduce burden, expand the number of certified centers of excellence in community settings, and improve access for populations outside major urban centers.

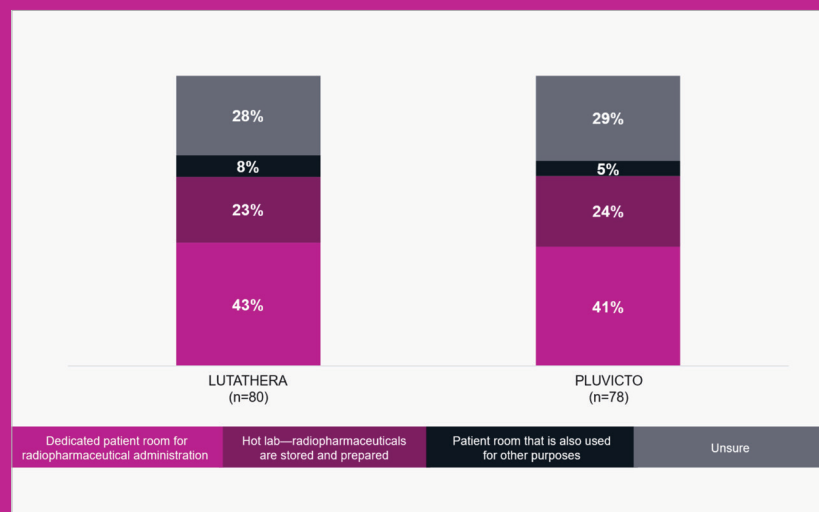


Figure 3: Delivery locations for Lutathera and Pluvicto. Internal primary research data collected Mar-Apr 2025. Responses do not add to 100% due to the multi-select format.

Radiopharmaceutical commercialization ultimately hinges on translating strategic intent into coordinated execution. Due to the high complexity and increased interdependence between stakeholders, biopharma companies should prioritize multidisciplinary and radiopharmaceutical-specific expertise to create an integrated strategy that accounts for the nuances of this modality.

Looking ahead: The next phase of radiopharmaceutical commercialization

The first wave of radiopharmaceutical commercialization benefited from favorable conditions, where initial adoption occurred primarily in highly sophisticated academic centers, sites with prior radiopharmaceutical experience, and environments accustomed to operational complexity. These early adopters absorbed friction without materially slowing uptake, but the industry is now moving into less prepared territory.

Key future considerations

Three key future-looking considerations should be top-of-mind for radiopharmaceutical biopharma companies:

Capacity as a limiting factor

As delivery moves into community practices and less experienced sites, biopharma companies will face greater staffing gaps, more variable infrastructure, and lower tolerance for operational disruption. This will result in operational capacity becoming a limiting factor for the industry as multiple products compete for the same staff, sites, and distribution lanes.

Workforce scarcity

Site capacity constraints will be compounded by the scarcity of licensed nuclear medicine professionals. Since training pipelines are not expected to scale in line with projected demand, workforce limitations will increasingly restrict throughput, expansion, and geographic reach.

Payer scrutiny

Historically, limited competition enabled relatively light payer management. However, as indications crowd and total spend aggregates, scrutiny is expected to increase. More specifically, over the next three to five years, several trends are likely to shape access:

- Increased site-of-care optimization, steering toward the most cost-efficient settings capable of administering

therapy, including institutions with nuclear medicine expertise and community practices as they become onboarded

- Potential utilization caps, episode-based reimbursement models, or bundled diagnostic–therapeutic structures as theranostics expand
- Credentialed networks introduced by radiology benefit managers that direct patients to qualified sites of care and require manufacturers to support pathway compliance
- Employer pressure on health plans to manage radiopharmaceutical spend, particularly as radioligand therapies blur the boundary between drug and procedural budgets

New indications

Infrastructure gaps and workforce shortages will persist across indications. Consequently, growth into new indications will still require not only clinical differentiation but deliberate planning to ensure infrastructure readiness and provider capability can keep pace with demand.

Implications for biopharma companies

As biopharma companies formulate their commercialization strategies, they should plan for:

- A constrained and specialized workforce
- Uneven site readiness across geographies
- Finite operational bandwidth at the provider level
- Increasing payer utilization management

Partnership models may partially mitigate these challenges. For example, collaboration with oncology practices and institutions can expand site readiness, increase geographic coverage, and improve payer navigation. These efforts may reduce regional access gaps and support more consistent prior authorization and appeals management.



Aligning expertise for radiopharmaceutical success

Radiopharmaceuticals represent a meaningful advancement in precision medicine, with several FDA-approved therapies already improving patient lives and many more promising candidates in the pipeline. However, biopharma companies face myriad barriers to successful radiopharmaceutical commercialization. These barriers surface at predictable points across the commercialization value chain, meaning biopharma companies that plan early and secure the right expertise can significantly increase their chances of successfully addressing them.

An optimal plan integrates clinical–commercial planning, reimbursement and coding design, supply chain and logistics coordination, and provider enablement. This integration will become even more important as radiopharmaceuticals expand into less prepared settings.

Further Insights from the Institute@Precision Radiopharmaceutical Series

This article is part of the **Institute@Precision** radiopharmaceutical series, which examines these therapies across the full clinical development-to-access continuum. Additional articles in the series extend the analysis, exploring:

- **Development strategy** — how access constraints intersect with trial design, regulatory expectations, and evidentiary robustness in global radiopharmaceutical development
- **Operationalization** — isotope supply resilience, radiopharmacy capacity, workforce readiness, and end-to-end logistics
- **Regulatory strategy** — comparator feasibility, evolving evidentiary expectations, and global alignment for infrastructure-dependent therapies
- **Investor perspectives** — commercial and reimbursement realities, globalization tailwinds, upcoming clinical, regulatory, and manufacturing milestones, and capital market sentiments

To read more about the unique challenges posed by radiopharmaceutical development and commercialization, and for quarterly expert insights into other timely precision medicine topics, please visit: www.instituteatprecision.com

About Precision AQ

Drawing on deep oncology and radiopharmaceutical expertise, **Precision AQ** partners with sponsors to support commercialization and market access with data-driven engagement and evidence strategies, enabling patients to access critical therapies.

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Greg is a market access and commercialization strategist who partners with biopharmaceutical companies to translate scientific innovation into real-world patient access. He focuses on pricing, reimbursement, and broader commercialization strategy across oncology and other complex specialty therapeutics, and is known for developing defensible, evidence-based approaches that align clinical value with real-world market dynamics. His work connects payer, provider, and patient considerations to support high-stakes decisions across development, launch, and lifecycle management. Drawing on a background in immunology and postdoctoral training in hematology, he brings a strong scientific foundation to designing commercialization strategies that resonate with both clinical and market stakeholders.



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Stephanie is a senior biopharma consultant with 15+ years of experience advising on pricing, value, and market access strategy across the product lifecycle. She leads early and launch pricing, value proposition and framework development, gap assessments, provider strategy, and coding and billing initiatives. She has significant expertise in oncology, rare disease, and cell & gene therapy. Her work spans the U.S., ex-U.S., and APAC markets, with a focus on aligning clinical evidence, reimbursement requirements, and commercial execution to enable successful global launches.



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Julianna is a board-certified oncology clinical pharmacist with more than eighteen years of clinical experience. Prior to joining Precision AQ in 2022, she worked at the US Oncology Network and Rocky Mountain Cancer Centers, where she provided clinical pharmacist expertise to support the safe and appropriate delivery of oncology medications, including radiopharmaceuticals. She served as a voting member of the Rocky Mountain Cancer Centers Pharmacy and Therapeutics (P&T) and Research Committees and contributed to the onboarding and operationalization of Lutathera as both an investigational and commercial product. Earlier in her career, she was a pediatric oncology clinical pharmacist at Stanford Children's Hospital, where she later served as the oncology investigational drug pharmacist and participated in multiple research consortia, including the Children's Oncology Group, St. Jude's Research Consortium, and the Pediatric Brain Tumor Consortium.





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Angelica advises on manufacturer market access strategy and execution across therapeutic areas. She is double board-certified in oncology and specialty pharmacy and has over 25 years of experience in key leadership roles across provider organizations, health plans, and PBM settings. Prior to joining Precision AQ in 2025, she worked for over 6 years at Optum, leading oncology medical and pharmacy benefit product solutions encompassing formulary and coverage policy development, preferred strategies, utilization management, pathways, and center of excellence (COE) network contracting. Additionally, Angelica worked for Piedmont Healthcare for 15 years, where she led clinical pharmacy programs and operations at the John B. Amos Cancer Center, with responsibility for formulary management, treatment plans, EHR builds, and 340B program management.



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Kyle has over a decade of experience advising pharmaceutical and biotechnology companies on pricing, market access, and commercialization strategy. His work spans the product lifecycle from early development through loss of exclusivity, with deep expertise in early valuation, launch pricing and contracting strategy, competitive simulations, lifecycle management, and value story development and optimization. Kyle supports access for innovative therapies across oncology, immunology, rare disease, and other complex specialty areas—including modalities with unique site-of-care, reimbursement, and operational considerations. Known for his analytical rigor and strategic insight, he is frequently sought out by clients and colleagues to help solve complex commercialization challenges.



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Cherry advises pharmaceutical and biotechnology companies on commercial strategy and market access across therapeutic areas, including oncology, hematology, rare diseases, nephrology, autoimmune, respiratory, and cardiovascular conditions. Her experience spans the product lifecycle from clinical development through post-approval commercialization. She has supported initiatives including launch sequence optimization, pricing and market access strategy, value communication and messaging, payer and provider contracting, lifecycle and loss-of-exclusivity planning, innovative contracting models, and clinical advisory boards for strategic program planning.



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