



# 1H 2024 results

Jasper C. Kurth, CEO

Brede Ellingsæter, CFO



# Becoming a world-leading supplier of alpha-emitters to cancer therapies creating a multi-billion USD market

New cancer therapies create a  
**USD 1bn+**  
revenue opportunity for us

Next industrial milestone  
**Pilot opening Q3'24**

Concept study for  
**'Fast-track' plant**

Listed on Oslo Børs (TRMED)  
**NOK ~250m**  
market capitalization



# Enabling a transformation of cancer care with next-generation precision treatment



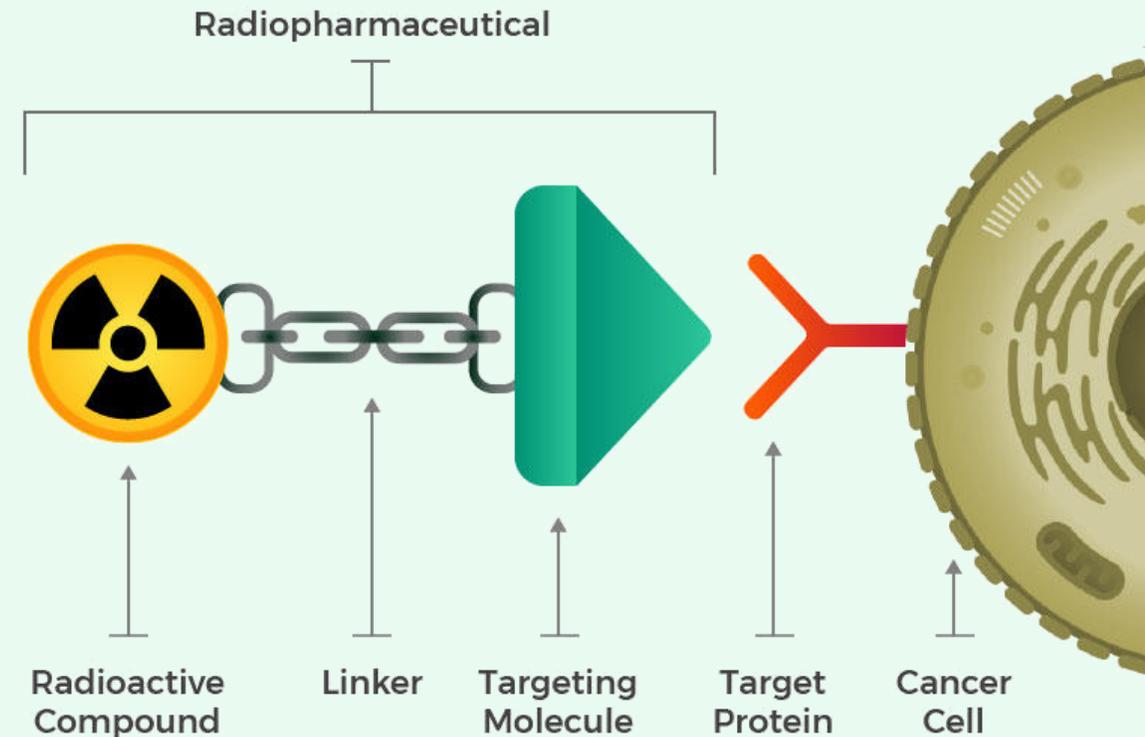
**Cancer is a leading cause of death** worldwide, accounting for around 10 million deaths per year



**Radiotherapeutics** represents one of the fastest growing cancer treatment options



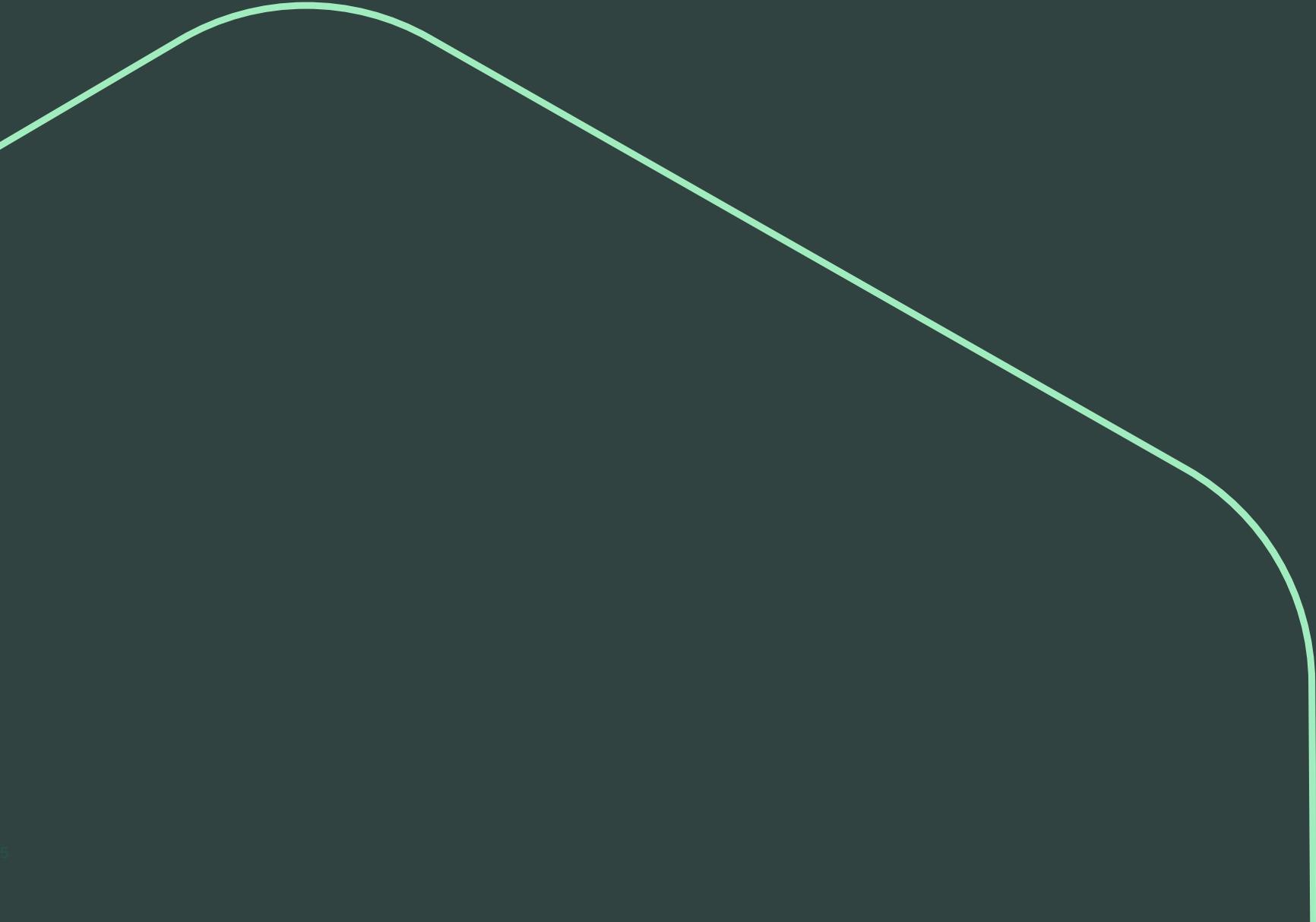
Thor Medical enables a transformation of cancer care with **alpha-emitters for next-generation precision treatment**



# 1H'24 highlights

- Pilot facilities at Herøya progressing on time and cost with completion targeted by end of Q3 2024 and delivery of customer samples by the end of the year
- Received NOK 6m grant from Innovation Norway related to the pilot facilities
- Received authorization from the Norwegian Radiation and Nuclear Safety Authority (DSA) for manufacturing, commercial trade, and import and export of radionuclides
- Entered cooperation agreement and MoU for feedstock supply with Steenkampskraal Monazite Mine in South Africa
- Completed feasibility study and started concept study for 'fast-track' plant with estimated capital requirement of approximately NOK 250m

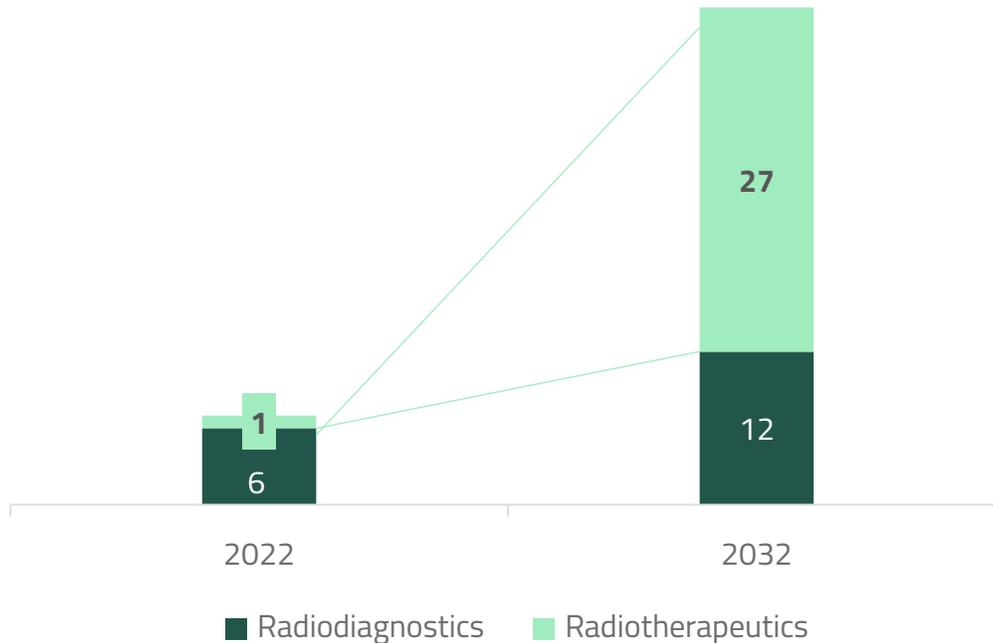




# Market development

# Radiotherapeutics facing a sharp growth trajectory

Global radiopharmaceutical market  
USD billion



- New cancer radiotherapeutics have reached sales in the **hundreds of millions USD**
- Radionuclides and their handling in hospitals are **tried and tested in the diagnostic space** (PET, SPECT, etc.)
- Untargeted therapies still dominate existing sales but **targeted therapies are picking up momentum**
- Current targeted therapies on the market are relying on **less energetic beta-decay**
- Bayer's Xofigo® (Ra-223-Dichloride) first introduced **more powerful alpha emission** into the field

# High deal activity in the radiopharmaceuticals market

**All time high**

oncology trial starts and 22% increase since 2018

**>USD 12bn**

radiopharmaceutical transactions LTM

**>USD 1bn**

raised in radiopharma financings LTM

**FINANCIAL TIMES**

The hunt for a rare nuclear isotope that could redefine cancer care

Battle of the alphas: lead-212 picks up speed in radiopharma

**CDMO Nucleus RadioPharma links up with ARTBIO to help produce prostate cancer candidate for clinical trials**

## Novartis to Buy Mariana Oncology, Paying \$1 Billion Upfront

- Radiopharma firms are sought after by large drugmakers
- Novartis may make up to \$750 million in milestone payments

**IONETIX closes financing led by Tees River and Eli Lilly and Company**

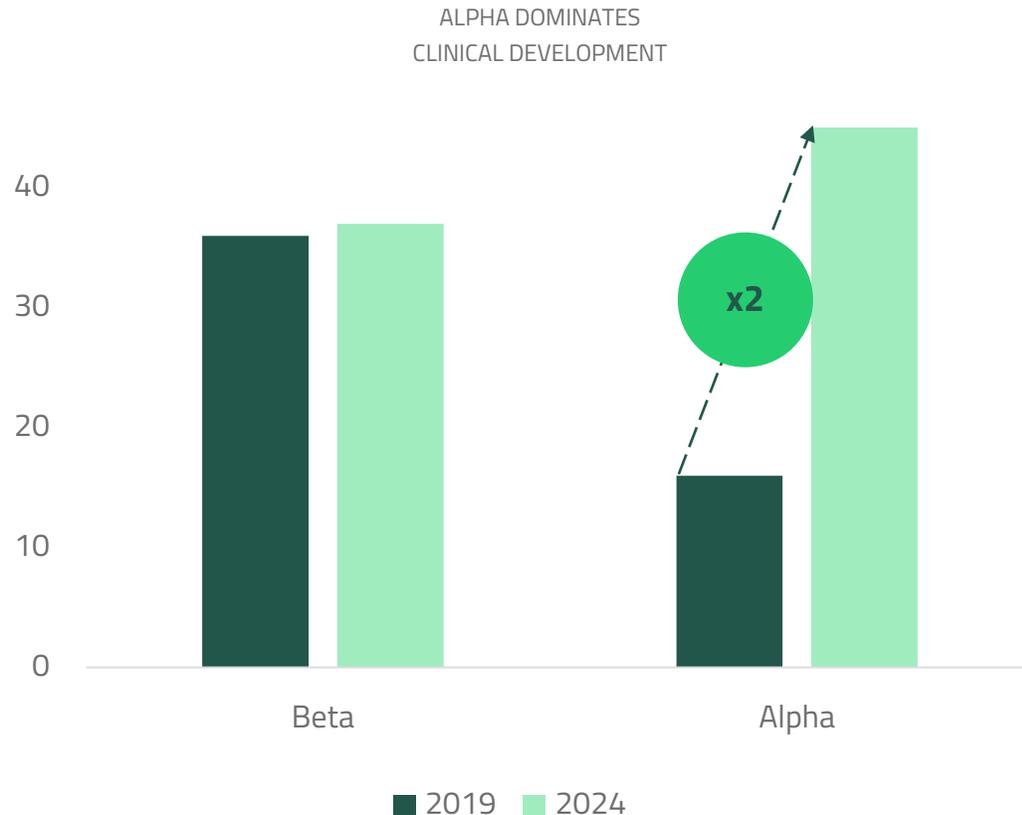
ONCOLOGY

**Lead seeks to lead in radiopharma**

Going nuclear: radiopharmaceuticals funding sees surge in 2024

# The future is alpha

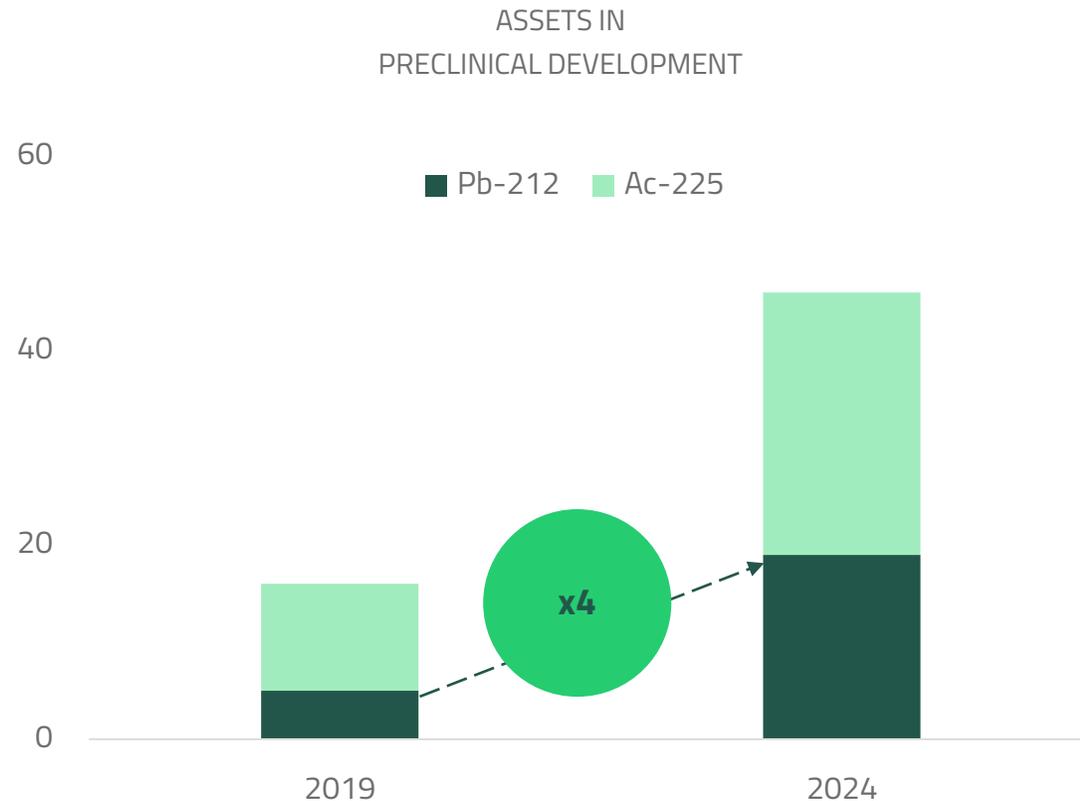
Alpha-particles yield better therapeutic performance with fewer side effects



## Alpha ( $\alpha$ ) > Beta ( $\beta$ )

- **Higher linear energy transfer**  
→ Greater therapeutic efficacy
- Direct cell death through **DNA destruction**  
→ Breaks **both DNA strands**
- Ability to kill single cells in the bloodstream,  
**hampering regrowth and new metastases**
- Shorter path ranges  
→ **Lower off-target toxicity** damaging healthy cells in surrounding tissue
- Short half-life  
→ **No long-lived radioactivity** in the patient

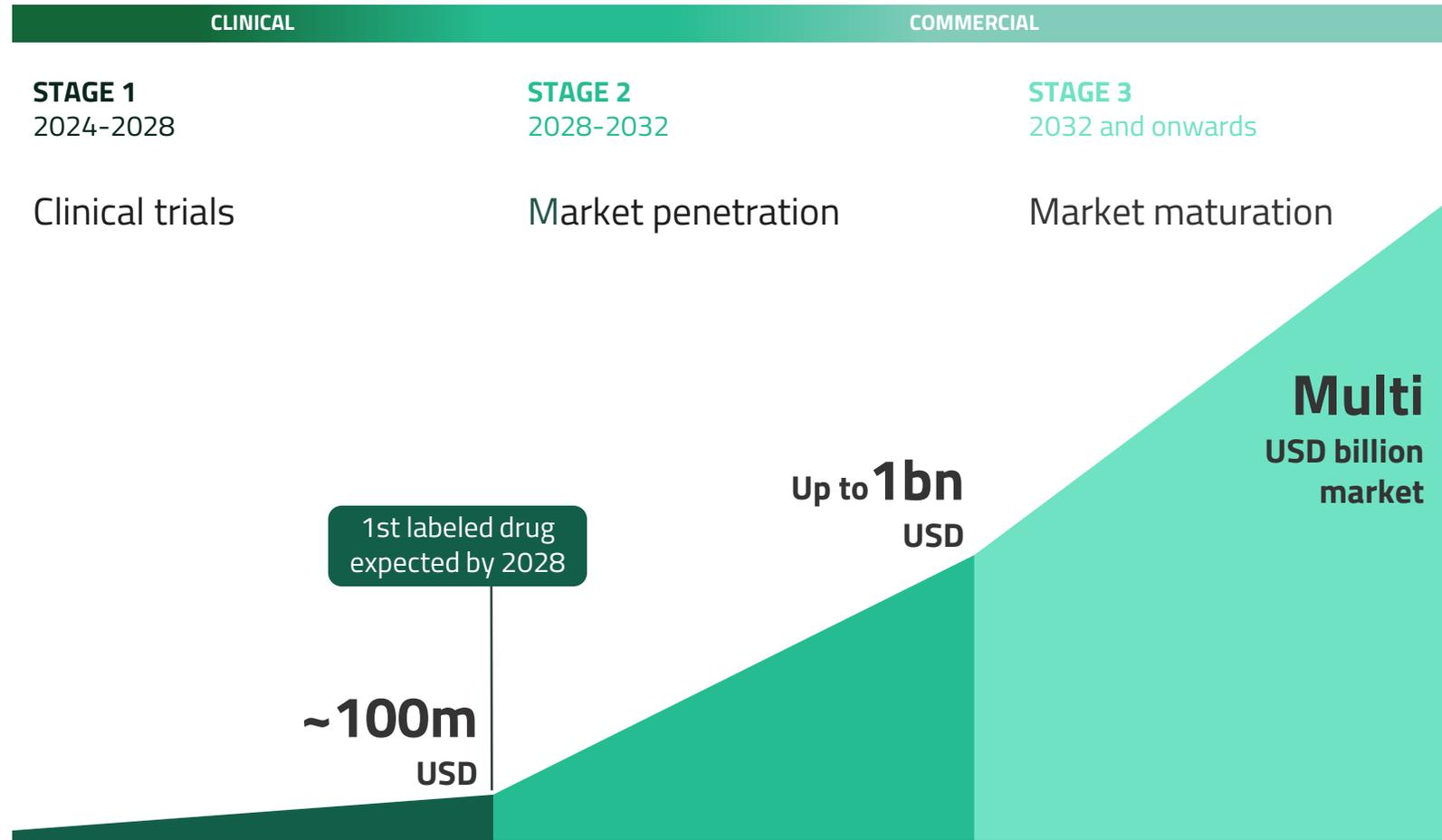
# Battle of the alphas – Lead-212 rapidly catching up with Actinium-225



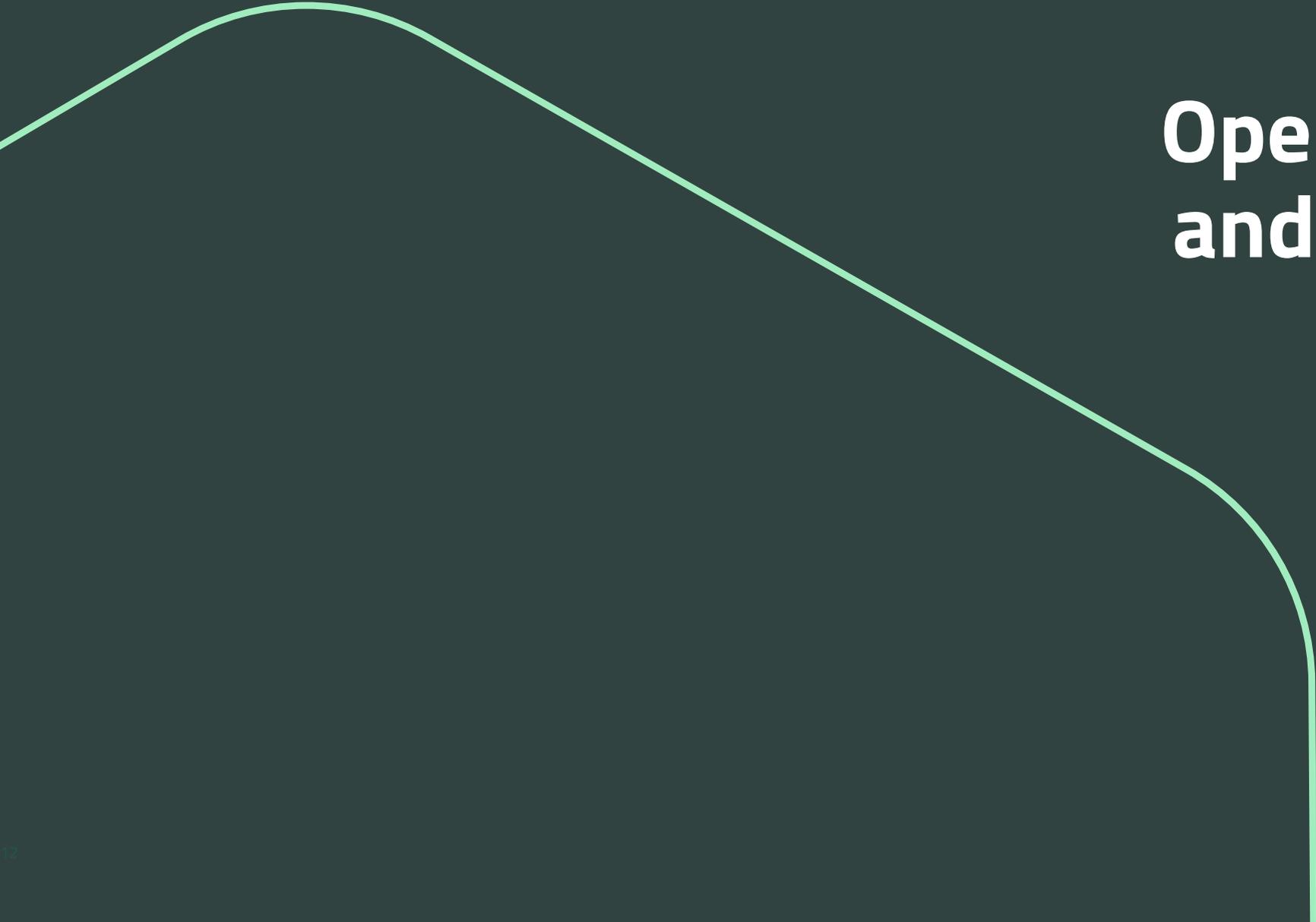
- **Pb-212 is the ideal isotope** in terms of efficacy, off-target toxicity risk (safety), and post-treatment waste handling due to short half-life<sup>1</sup>
- **Higher growth in Pb-212** clinical development programs compared to Ac-225 in recent years, fueled by an emerging value chain for Pb-212
- **Supply shortage of Ac-225** causing halt in clinical trials – increased focus towards Pb-212 produced from natural thorium



# A rapidly growing Th-228 market with USD billion potential



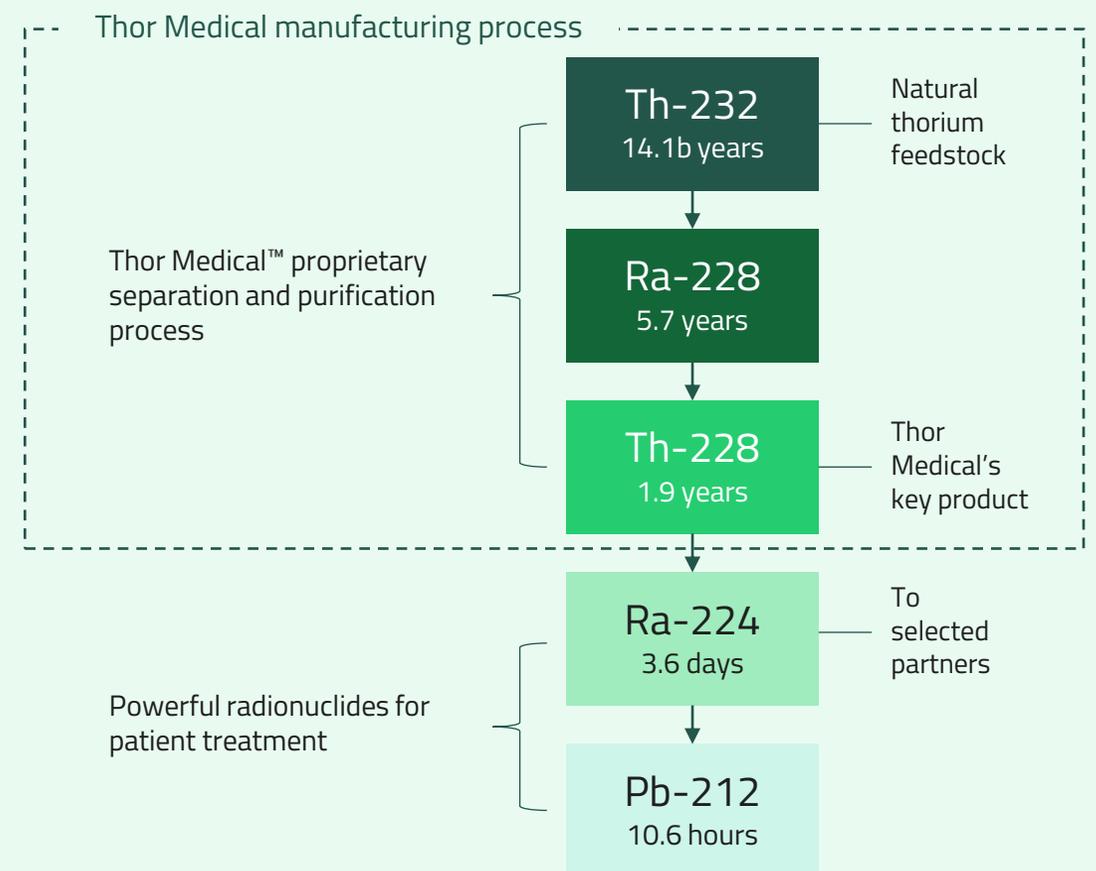
- Market with **significant growth potential** as it matures
- **A single successful** Th-228-based product can create a market worth several hundred million USD
- **15 assets in clinical trials**, of which several are already in Phase 2



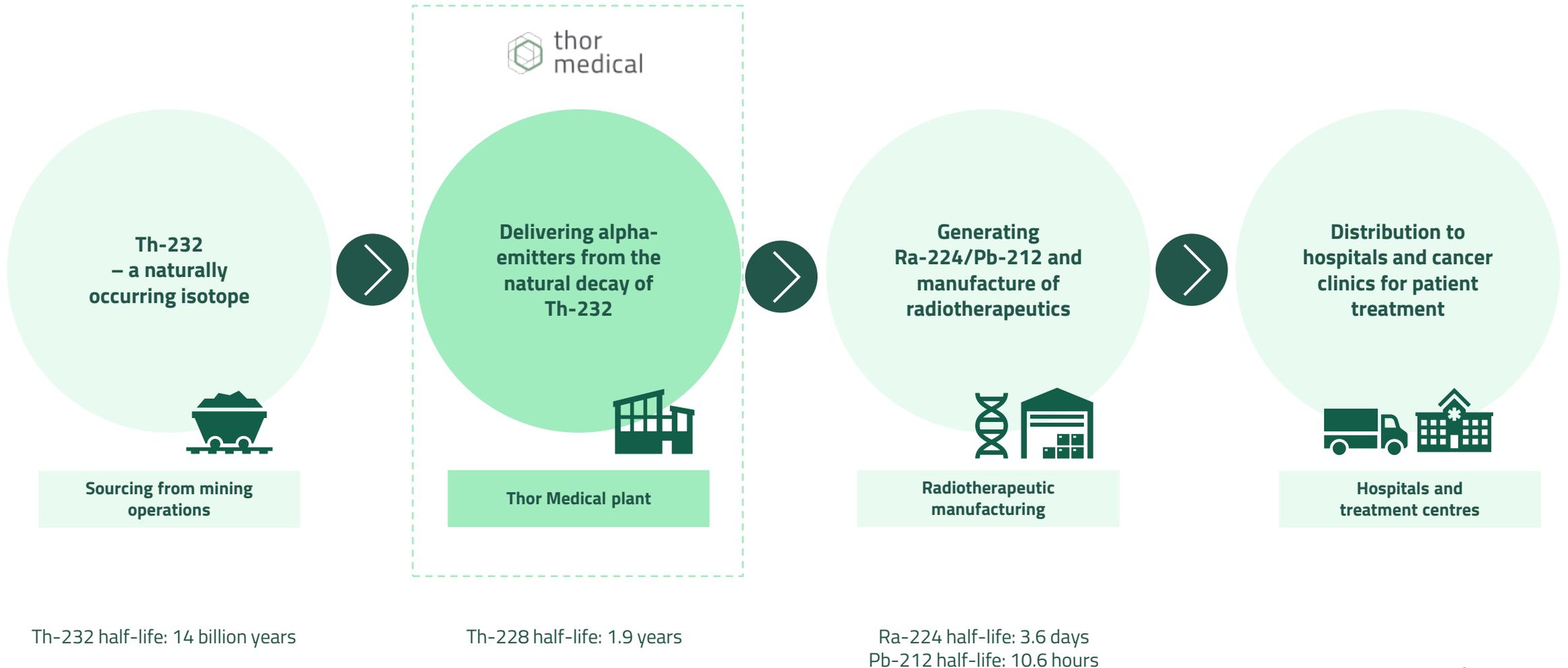
# Operational plans and development

# Proprietary technology offering the world's purest radionuclides from natural decay of thorium

- **Delivering high purity Th-228**, parent isotope for Ra-224 and Pb-212, based on natural decay requiring no irradiation
- Natural decay chain **avoids radioactive contaminants** and impurities arising in irradiation-based processes
- **Proven and scalable** cost-effective separation method with 99.9% yield based on infinitely reusable Th-232 feedstock
- **Patent pending** production process and products



# Building a value chain for next-generation cancer therapies



# Pilot facility on track for completion September 2024

- Pilot facility at Herøya, Norway to be completed in September 2024 with all relevant authorizations in place
- Production start in Q4 2024 with target to deliver first product samples to strategic customers by end of the year
- Facility of NOK ~10m capex (NOK 6m Innovation Norway grant) holds complete production line and state of the art QC function
- Pilot to provide basis for:
  - **Verification** of production process and technology at industrial scale
  - **Production** of product samples to strategic customers
  - **Scale-up** to industrial manufacturing

**Herøya, Norway**  
Location

**100 patient doses**  
Annual capacity

**4-6 FTEs**  
Employment

**Q4 2024**  
Production start



# Production scale-up: 'Fast-track' commercial volumes

- Ongoing clinical development of radiopharmaceuticals using Pb-212 require large volume of thorium-based radioisotopes
- Targeting 'fast track' scale-up to commercial production at Herøya - feasibility study for 'fast-track' plant completed in Q2, with preliminary capital requirement estimated at NOK 250m
- Initiated concept study to be concluded in Q4 2024 - target final investment decision (FID) by end of Q1 2025, provided offtake agreements and financing in place
- 'Fast track' production capacity of 12,500 patient doses, representing annual revenue of NOK 200m with cash-positive operations
- Seeking to provide customers with material from pilot plant while awaiting start-up of the 'fast-track' plant

**Herøya, Norway**  
Location

**12,500 patient doses**  
Annual capacity

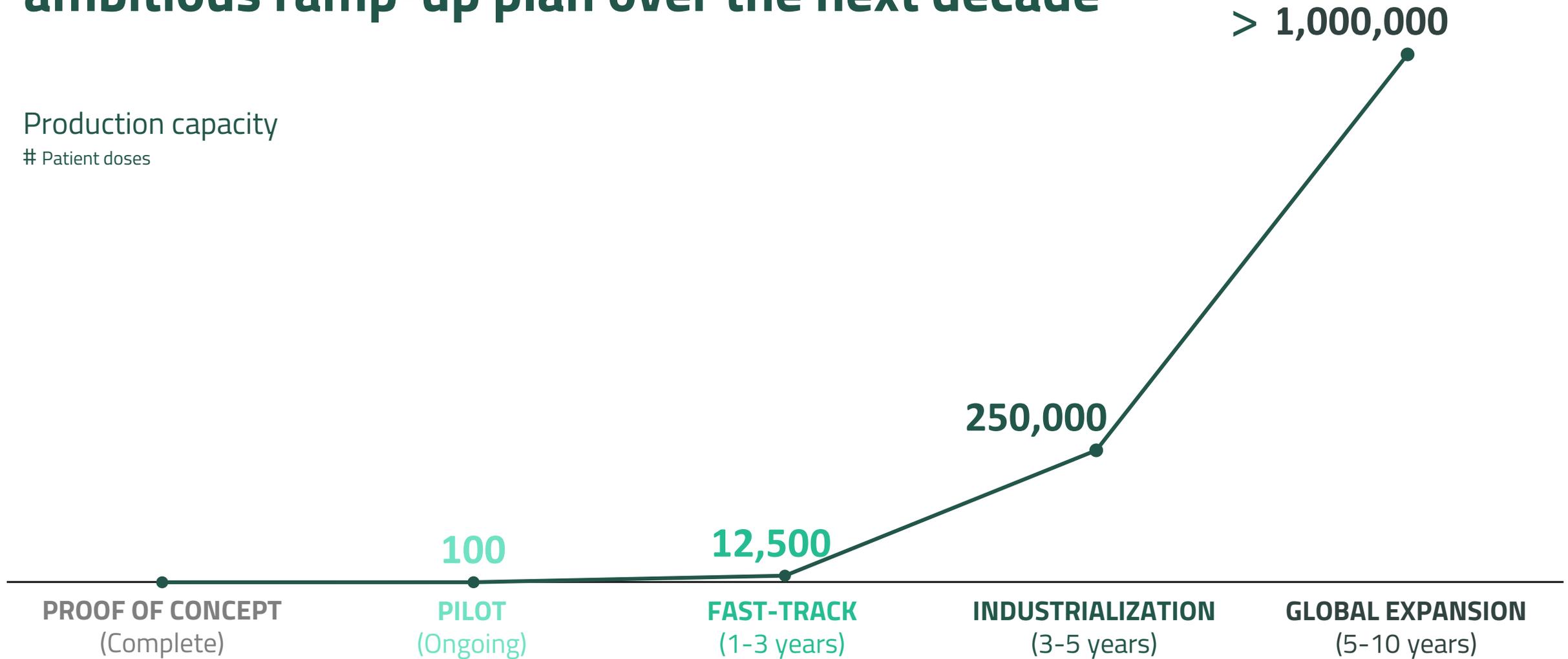
**15-20 FTEs**  
Employment

**12 months from FID**  
Production start



# Sharply growing market opportunity enables ambitious ramp-up plan over the next decade

Production capacity  
# Patient doses



# Financials

# Limited capital requirements until investment decision for commercial scale production

Financial key figures (in NOKm)	1H 2024	1H 2023
<b>Revenues</b>	0.0	0.0
<b>EBITDA</b>	-12.7	0.0
<b>Profit / (loss) before taxes</b>	-13.1	0.0
Profit/loss for the period from discontinuing operations	0.0	-26.5
<b>Net cash flow</b>	-12.2	-48.5
<b>Available cash</b>	29.6	50.2

- Secured additional funding of NOK 6m from Innovation Norway for pilot facility
  - NOK 1.8m received in 1H 2024
  - Remainder will be received in 2H 2024
- Expensed NOK 5m in pilot facility in 1H 2024 to be completed in 2H 2024
- Pilot phase fully funded with limited capital requirements until investment decision for commercial production scale – runway through 1H 2025

# 'Fast-track' investment estimated to NOK 250m

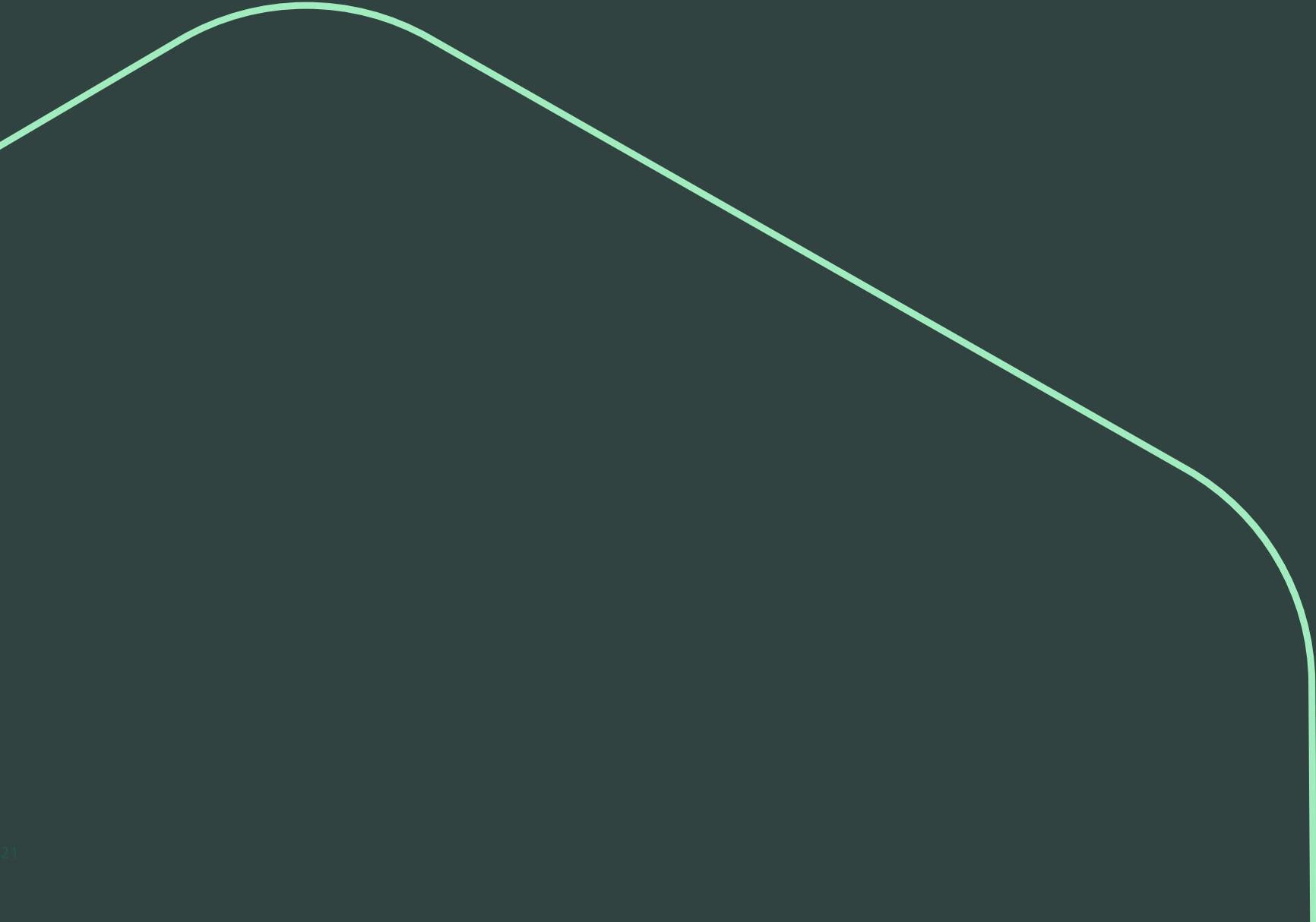
- Estimated capital requirements of NOK 250m based on feasibility study
- Small investment compared to biotech benchmarks
- Will generate a cash-positive operation with risk diversified across multiple customers
- Investment decision expected by end of Q1 2025
- To be financed through debt and equity from new investors and existing shareholders in Thor Medical
- Evaluating broad range of capital sources, including infrastructure funds, specialist pharmaceutical funds, and public support schemes

## Sources of financing

Equity  
new investors

Equity  
existing shareholders

Debt



# Outlook

# Outlook and priorities 2H 2024

- **Completing and ramping up production** of the company's "first-of-kind" pilot facilities at Herøya Industrial Park
- Delivering of the **first product samples** to the company's strategic customers
- Advancing commercial discussions with leading radiopharmaceutical companies targeting to **sign offtake agreements**
- Further developing partnerships with multiple suppliers to safeguard **sustainable feedstock supply** when reaching global expansion scale
- **Finalizing ongoing concept study** for fast-track plant - target investment decision by end of Q1, provided offtake and financing in place



Why invest in Thor Medical

# We are enabling next-generation precision cancer treatments

1

## Major market opportunity

The radiotherapeutics market is set to increase to USD 27bn by 2032, with alpha-emitting radioisotopes enabling next-generation precision cancer treatment. TRMED could generate annual revenues exceeding USD 1bn

2

## Unique, verified and scalable technology

Preparing for large-scale commercial supplies of the world's purest Thorium-based radioisotopes, based on verified patent-pending technology

3

## Clear operational roadmap

Advancing pilot facilities as planned and within budget. Concept study for a "fast-track" plant aims to enable commercial volume deliveries by the end of 2025, positioning Thor Medical for rapid scale-up and market penetration

4

## Clear financial roadmap

Remains fully funded through pilot phase with only limited capital requirements until the planned investment decision regarding commercial scale production

5

## Strong teams and supportive owners

Extensive experience in nuclear medicine and radiochemistry, founded in the Norwegian radiopharmaceutical cluster and backed by Scatec Innovation



Thor Medical is an emerging supplier of radionuclides, primarily alpha particle emitters, for medical use in cancer therapy. Its proprietary production technology requires no irradiation, and provides reliable, environmentally friendly, cost-efficient supply of alpha-emitters for the radiopharmaceutical industry.

Thor Medical HQ  
Karenslyst allé 9C  
NO-0278 Oslo, Norway

[thormedical.no](http://thormedical.no)

# Strong team with solid track record



## Jasper Kurth

Chief Executive Officer

- CEO of Thor Medical
- >15 years' experience in the pharmaceutical and med-tech industry through various roles in Bayer Pharmaceuticals
- Latest role in Bayer as General Manager Radiology Nordics



## Brede Ellingsæter

Chief Financial Officer

- CFO in Thor Medical
- Former CFO in Scatec Innovation and Elkem (Carbon Solutions Division)
- MSc from Norwegian School of Economics (NHH)



## Dr. Sindre Hassfjell

Chief Technology Officer

- >30 years' experience in nuclear and radiochemistry scientific research
- Former project leader and Section head at IFE
- Ph.D. in Nuclear Science, University of Oslo (UIO)



## Dr. Alf Bjørseth

Senior VP and Strategic Advisor

- Former CEO of Thor Medical
- Serial entrepreneur, former R&D director Hydro and CTO Elkem
- Ph.D. in physical chemistry from University of Oslo (UIO)



## Astrid Liland

VP EHS

- >20 years experience from Norwegian Radiation and Nuclear Safety Authority (DSA)
- Came from the position of Director for Department of Emergency Preparedness and Response in DSA

### Board of Directors

Ludvik Sandnes  
Chair

John Andersen jr.  
Director

Mimi Berdal  
Director

### Technical Advisory Board

Roy Larsen

Brit Farstad

### Founder and main shareholder

 scatec  
innovation

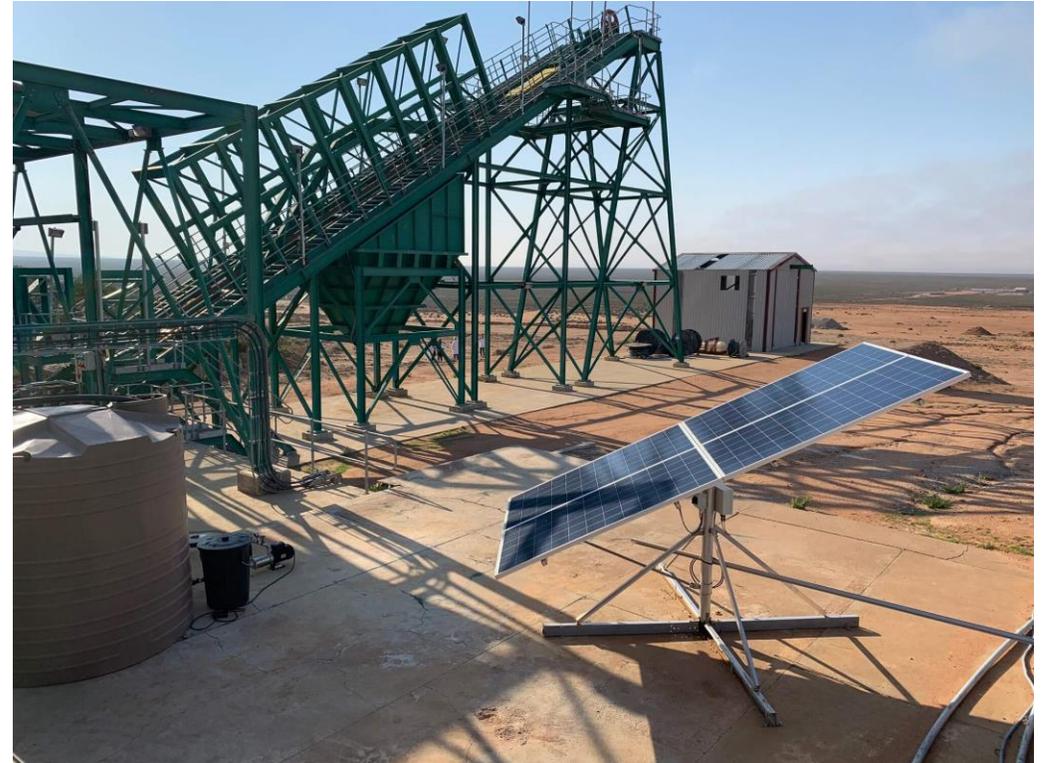
 thor  
medical

# Battle of the alphas

	Lead (Pb-212)	Actinium (Ac-225)
Emission profile	Alpha	Alpha
Half life	10.6 hour	10 days
Off target toxicity risk	Low	High
Isotope supply	Naturally abundant	Scarse
Cost of production	Low	High

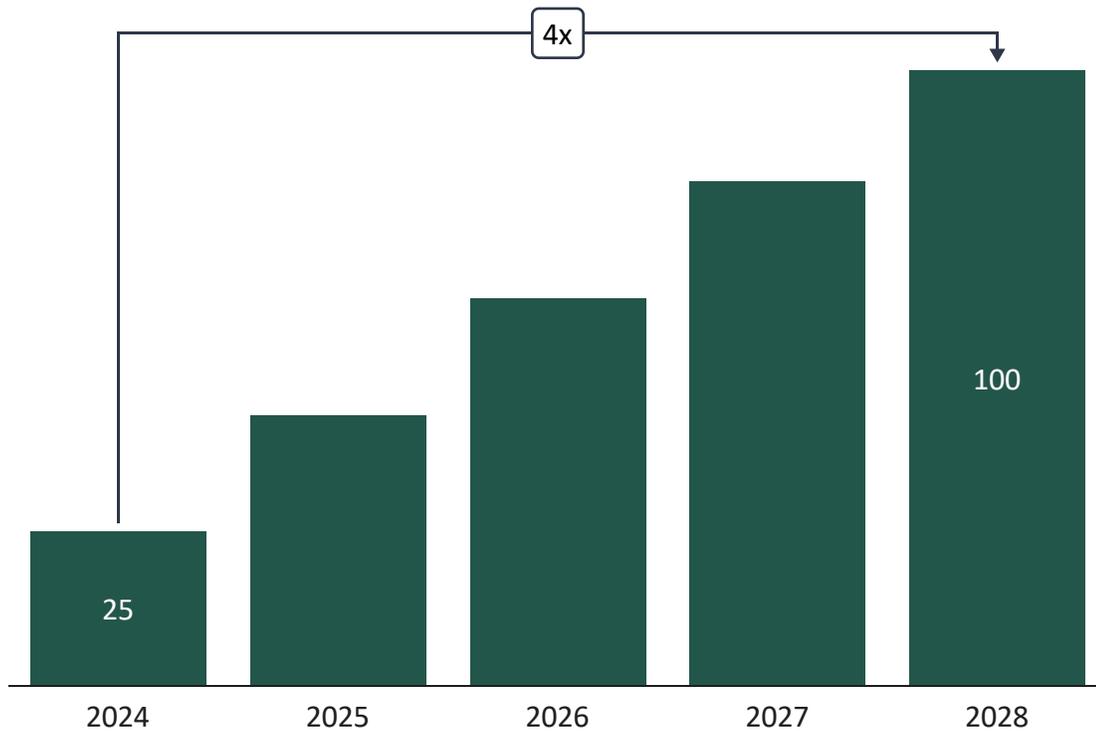
# Steenkampskraal feedstock supply and technology cooperation – the highest concentration Th mine worldwide

- The Steenkampskraal Monazite Mine in South Africa considered to have the highest concentration of thorium globally
- Signed a MOU for feedstock supply and technology cooperation in June 2024
- Aiming for a long-term partnership to utilize Thor Medical's expertise in producing valuable alpha-emitters
- Mine refurbishment and construction begin by late 2024, aiming for thorium production by late 2025



# Ongoing clinical trials alone require significant amount of Th-228, calls for fast-track alternative

Indicated demand for Th-228 from clinical trials alone (USDm)



Implied clinical trials market size 2028<sup>1</sup>

**USD up to 100m**



**10+ companies...**

are progressing with more than 15 clinical trials across various cancer treatments utilizing Th-228 as parent isotope for Ra-224 and Pb-212