PERSPECTIVE THERAPEUTICS

$^{203}Pb/^{212}Pb$ Image-guided alpha-particle therapy for cancer. Progress and Metrology Challenges

February 2024

NYSE: CATX

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Forward-looking statements contained in this presentation are made as of this date, and the Company undertakes no duty to update such information whether as a result of new information, future events or otherwise, except as required under applicable law.

Radiopharmaceuticals are a Pillar of Oncology Treatment

Unique Mechanism of Action Offers Pan-Cancer Opportunities

Molecularly Targeted Radiation

Radioligands can precisely deliver radiation directly to cancer cells reducing off-target effects
Proven pillar of cancer treatment
Perspective's platform technology is optimized for greater efficacy and fewer side effects

Optimized Patient Selection

Molecular imaging companion diagnostics enable visualization of the therapeutic target
Enables the selection of patients who may best respond to therapy
Perspective's elementally matched isotopes are paired for imaging and therapy

Monotherapy Activity and Combination Synergies

Ability for both monotherapy and combination treatments
Potential synergies with DNA damage response and immune checkpoint inhibitors
Perspective's targeted alpha therapy delivers potent and immunostimulatory radiation to tumor

Outpatient Friendly

Modern medical isotopes enable radiopharmaceuticals to be administered outside of hospitals
Treatments are easily-accessible globally with several hundred therapeutic locations in the U.S alone
Perspective's short half-life isotopes simplify patient administration and waste management

Unique Business Opportunity

Radiopharmaceutical theranostic product development is highly-specialized and technical
Greater expertise needed than for standard medicines potentially creating higher barriers to entry
Perspective develops patent-protected best-in-class intellectual property

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α-Particles Have Superior Tumor Killing Properties vs. β-Particles

More Powerful Effects Than Approved β Therapy

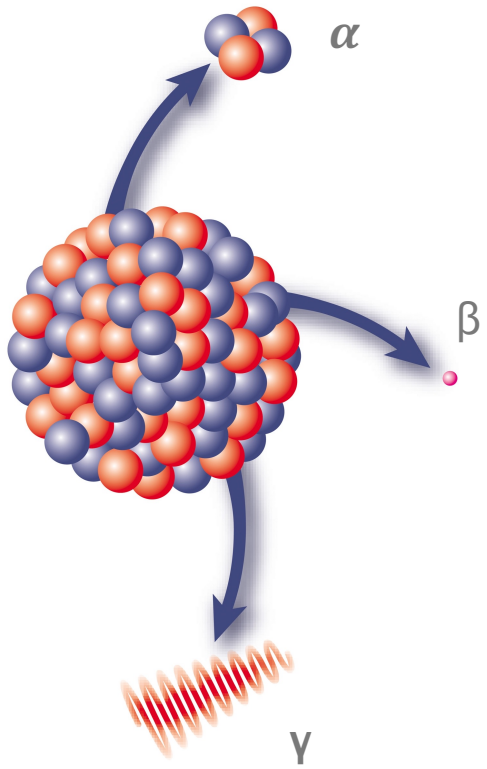
Higher atomic mass
Lethal double-stranded DNA breaks
DNA repair mechanisms overwhelmed

Precision Delivery Provides Targeted Cell Destruction

Deposit energy over 3-5 cell diameters vs. beta particles (up to 200 cells)

Anti-Tumor Immune Response[1]

Evidence for antitumor response alone or in combination with immunotherapies
Consistent with “Abscopal effect” observed with external beam radiation therapy



α-particles are >7,000-fold greater in atomic mass

[1]Li et al., Cancers, Jul 22;13(15), 2021

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Management Team

Deep Experience in Radiopharmaceuticals and Oncology Drug Development

Thijs Spoor

Chief Executive Officer

20+ years of expertise in biotechnology companies; public and private companies; oncology and nuclear pharmacy

Markus Puhlmann, MD MBA

Chief Medical Officer

20+ years of oncology drug development across all phases, experience coordinating multiple regulatory filings

Michael Schultz, PHD

Co-Founder and Chief Science Officer

20+ years industry and research experience in radiopharmaceuticals; inventor of Perspective radiopharmaceutical products

Jonathan Hunt

Chief Financial Officer

20+ years of expertise in financial controls and public accounting for large and small companies across multiple industries

Frances Johnson, MD

Co-Founder and Chief Innovation Officer

20+ years in clinical trials execution, managing academic research programs, and start-up of CareDx, Inc.

Amos Hedt

Chief Business Strategy Officer

20+ years of expertise in early-stage pharmaceutical and biotech drug development; 10+ years in radiopharmaceuticals

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Platform Expansion Engine

Two Lead Programs in Clinic and Broad Proprietary Pipeline

Program	Indication	Discovery	Human Clinical Imaging	First in Human Therapy	Phase 1/2	Phase 3
VMT-α-NET	Neuroendocrine cancer					
	Pheochromocytomas, paragangliomas					
	Small cell lung cancer					
VMT01	Melanoma *(MC1R)*					
VMT02 *(PET agent)*	Melanoma (imaging of MC1R)					
Program 3 *(Novel peptide)*	Multiple solid tumors					
PSV401 *(Radio-hybrid)*	Prostate (PSMA imaging & therapy)					
Program 5 *(Novel peptide)*	Prostate, Breast					
Other Programs	Solid and hematological tumors					

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Lead-212 (^{212}Pb): The Optimal Therapeutic Isotope

Alpha Particles Provide Numerous Benefits Over Currently Used Beta Particle Radiotherapies

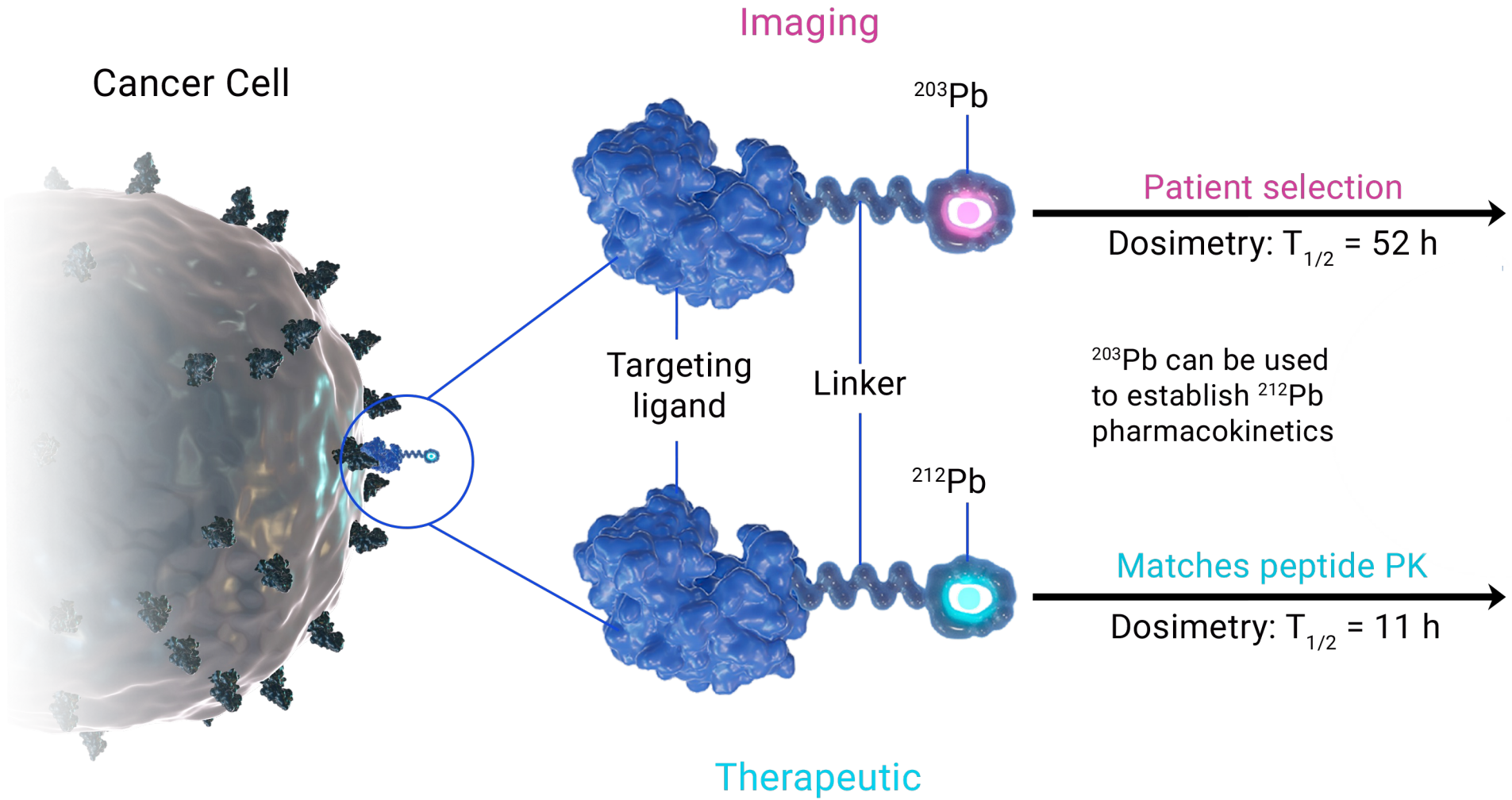
- With a much higher atomic mass, **alpha (α)** particles generate more energy and travel a shorter distance compared to beta (β) particles, making them more cytotoxic, while reducing their off-targeting effects on healthy tissue
- Alpha radiation causes direct lethal double-stranded DNA breaks, vs indirect single-stranded breaks in beta (β) radiation
- Cell death expected – NO resistance
- Greater therapeutic efficacy expected to improve outcomes with better safety

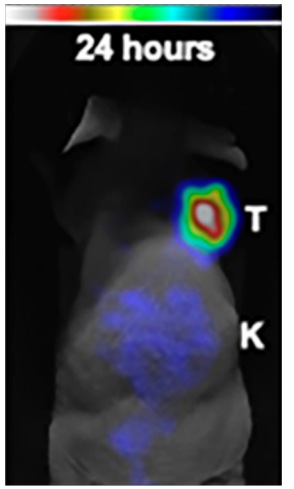
	Lead (^{212}Pb)	Iodine (^{131}I)	Lutetium (^{177}Lu)	Actinium (^{225}Ac)	Implication[1]
Emission Profile	Alpha	Beta	Beta	Alpha	Potent
Half Life	0.46 days	8 days	6.7 days	10 days	High dose-rate
Off Target Toxicity Risk	Low	Very high	Low	High	Best
Supply	High	High	Low	Low	Abundant
Cost of Production	Low	Low	High	High	High margin

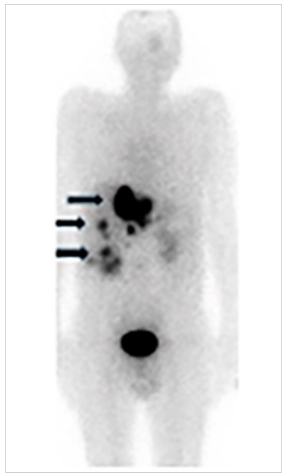
[1]Company estimates and assumptions based on current literature and known physical constants

Pb-based Theranostics Enable Both Diagnosis and Targeted Treatment of Cancer

Identical Distribution of ^{203}Pb and ^{212}Pb for Imaging and Treatment, Respectively







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Neuroendocrine Tumors: VMT-α-NET

Targeting the somatostatin receptor to treat rare neuroendocrine-type cancers

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VMT-α-NET Currently in Phase1/2a Studies: Key Facts

Targeting somatostatin receptor type 2 (SSTR2) for the imaging and treatment of neuroendocrine tumors

Initiated first-in-human imaging (2021) & therapy (2022) under compassionate use

Fast Track Designation for first line therapy received October 2022

Therapeutic Trial in first line setting currently recruiting under open IND

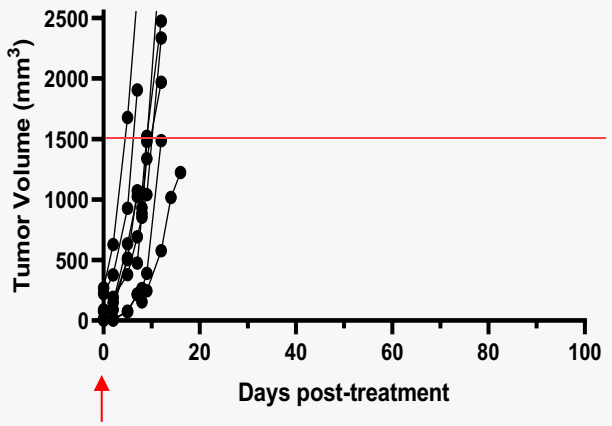
US Phase 1 prospective dosimetry study in PRRT refractory patients recruiting at the University of Iowa

Image Panel: SPECT scan of NETs patient imaged with [^{203}Pb]VMT-α-NET

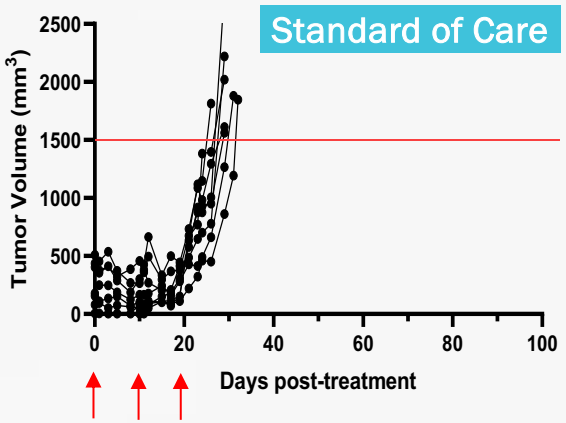
VMT-α-NET Shows Significant Improvement vs Standard of Care in Preclinical Models

Superior Efficacy with Single Dose or Multiple Administrations

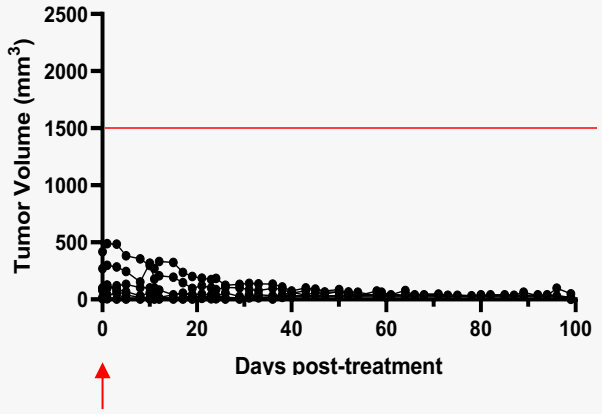
Vehicle



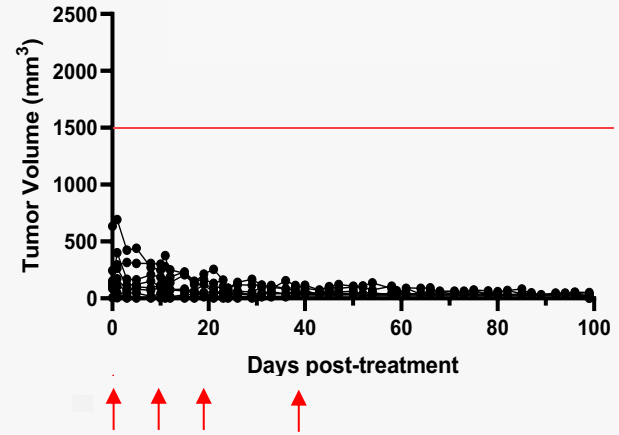
[^{177}Lu]DOTATATE (3 x 500 µCi)



[^{212}Pb]VMT-α-NET (1 x 120 µCi)



[^{212}Pb]VMT-α-NET (4 x 30 µCi)



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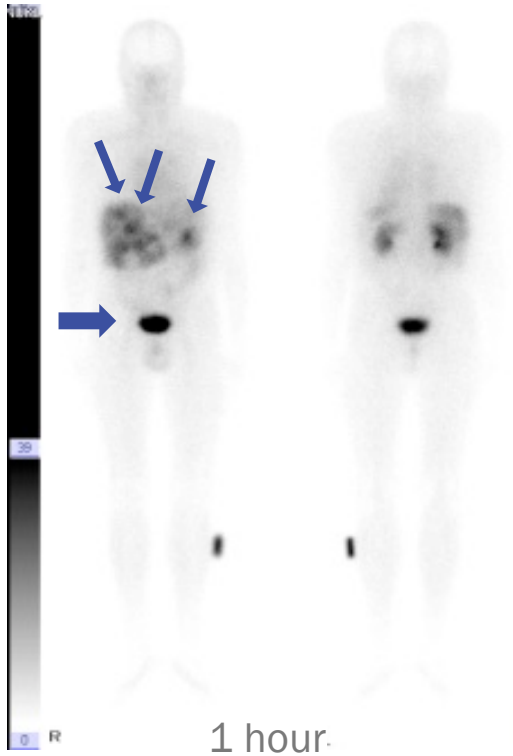
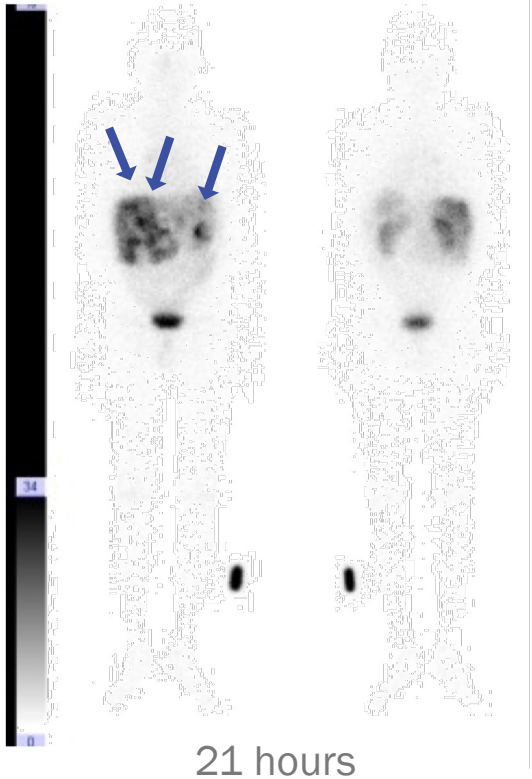
^{203}Pb SPECT Imaging Reveals Favorable VMT-α-NET Properties[1]

Rapid Tumor Targeting and Renal Clearance



1 hour

High Tumor Retention



21 hours

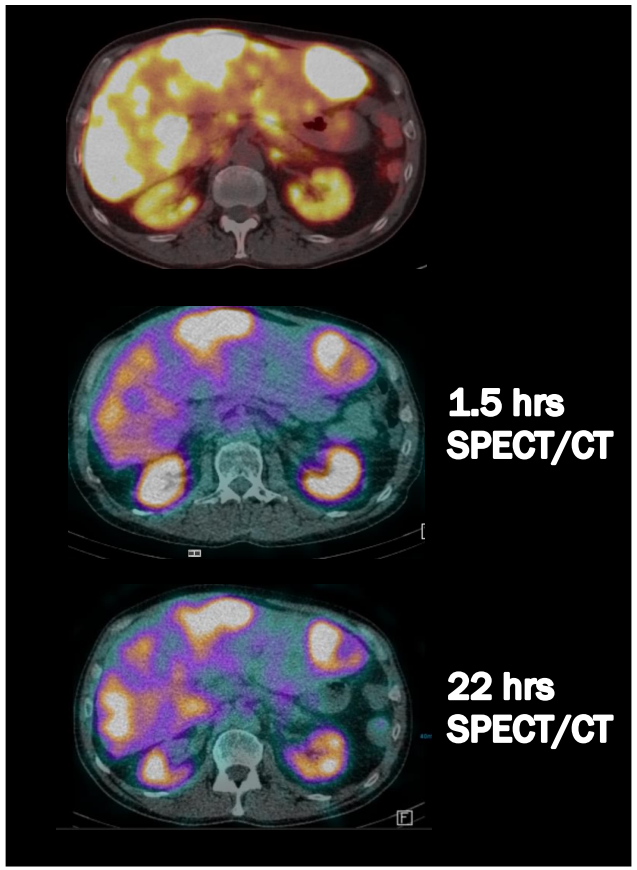
- Tumors visible within 1 hour indicates rapid binding to SSTR2 target
- High intensity above background implies excellent therapeutic window
- Unbound drug in bladder within 1 hour for excretion
- Low renal retention due to neutral charge on proprietary Pb-specific chelator

[1]Muller et al., Clin. Nucl. Med. 2023

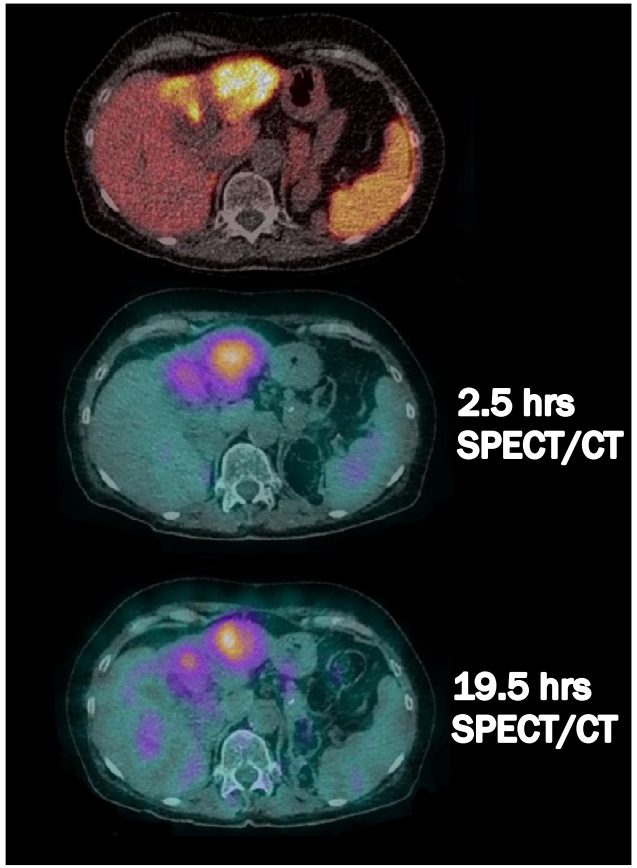
^{212}Pb SPECT/CT Imaging Confirms VMT-α-NET Tumor Uptake

Diagnostic and Therapeutic Show Same Uptake and Retention Characteristics

^{203}Pb SPECT/CT Imaging[1]
Pt#001



^{212}Pb SPECT/CT Imaging[2]
Pt#009



- Both ^{203}Pb and ^{212}Pb can be imaged directly using SPECT
- SPECT/CT shows very rapid tumor uptake and retention of [^{212}Pb]VMT-α-NET
- After 24 hours more than 80% of alpha particles will be generated
- This high alpha dose rate is ideally matched to the biological clearance of the VMT-α-NET peptide

[1]Muller et al., Clin. Nucl. Med. 2023; [2]Michler et al., EJNMMI 2023

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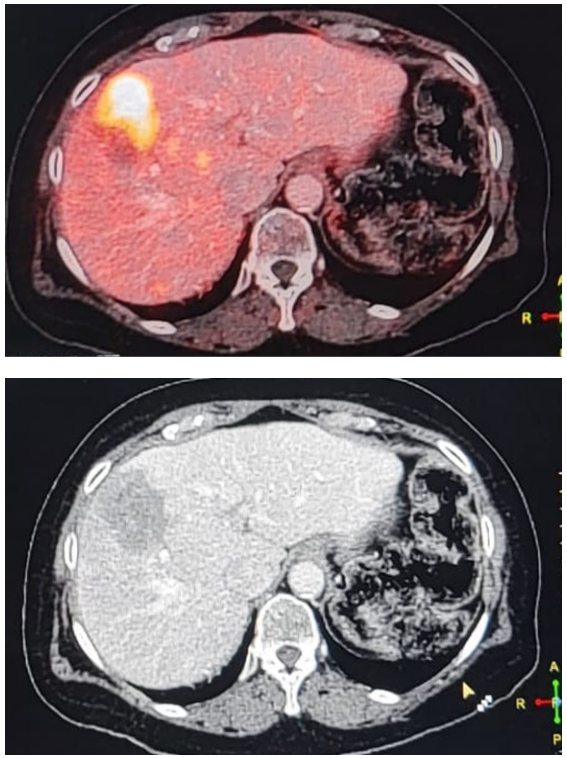
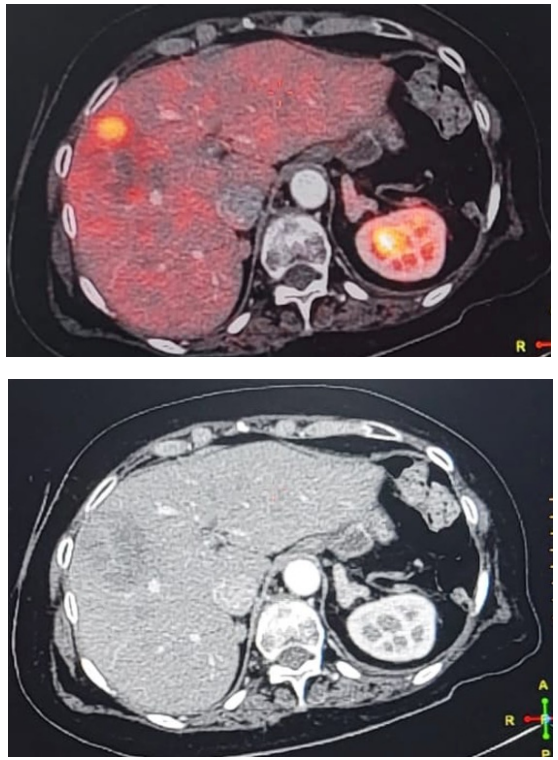
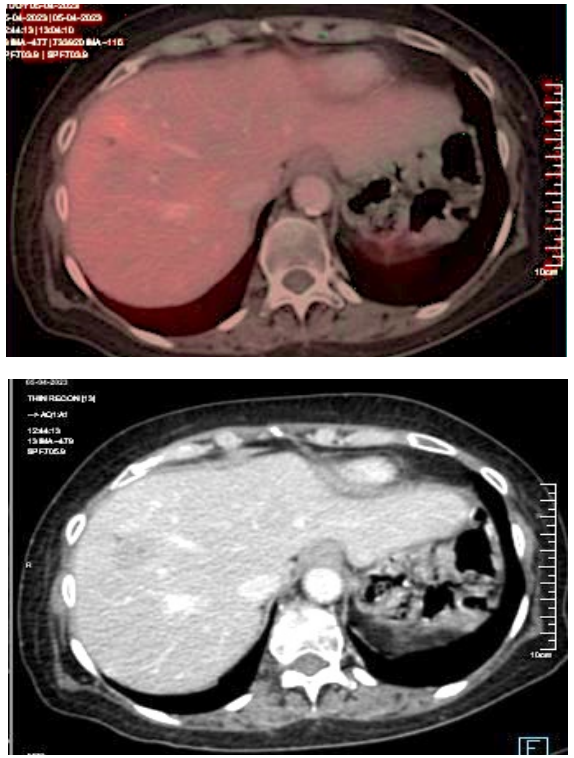
Almost Complete Response After 3 Doses of [^{212}Pb]VMT-α-NET

Metastatic NET Pancreas with Adrenal Crisis – PET/CT

Tumor Before Treatment	Tumor After 1 Dose	Tumor After 3 Doses







(S.ACTH)[1]– 790 pg/ml

S.ACTH – 96 pg/ml

[1] Serum Adrenocorticotropic Hormone

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^{212}Pb is Plentiful, Storable, Scalable & Suitable for Distributed Logistics

The supply chain is lower-risk and more robust than other therapeutic isotopes

Isotope Source

Naturally occurring in mining waste

Also produced in industrial nuclear processes

Can be made on demand if needed

All other therapeutic isotopes require capital-intensive infrastructure manufacturing processes (irradiation)

Isotope Purification

Parent isotope Thorium-228 can be stored (2 yr half-life)

^{212}Pb purified from 228Th or 224Ra source in simple separation step

VMT-α-GEN enables shipping of isotope and purification of ^{212}Pb in one package

Product Manufacturing

VMT-α-GEN ^{212}Pb generator technology scales for commercial production

Extremely pure isotope allows straight forward manufacturing process

10.5 hr half life of ^{212}Pb allows for robust regional distribution of finished radiopharmaceuticals

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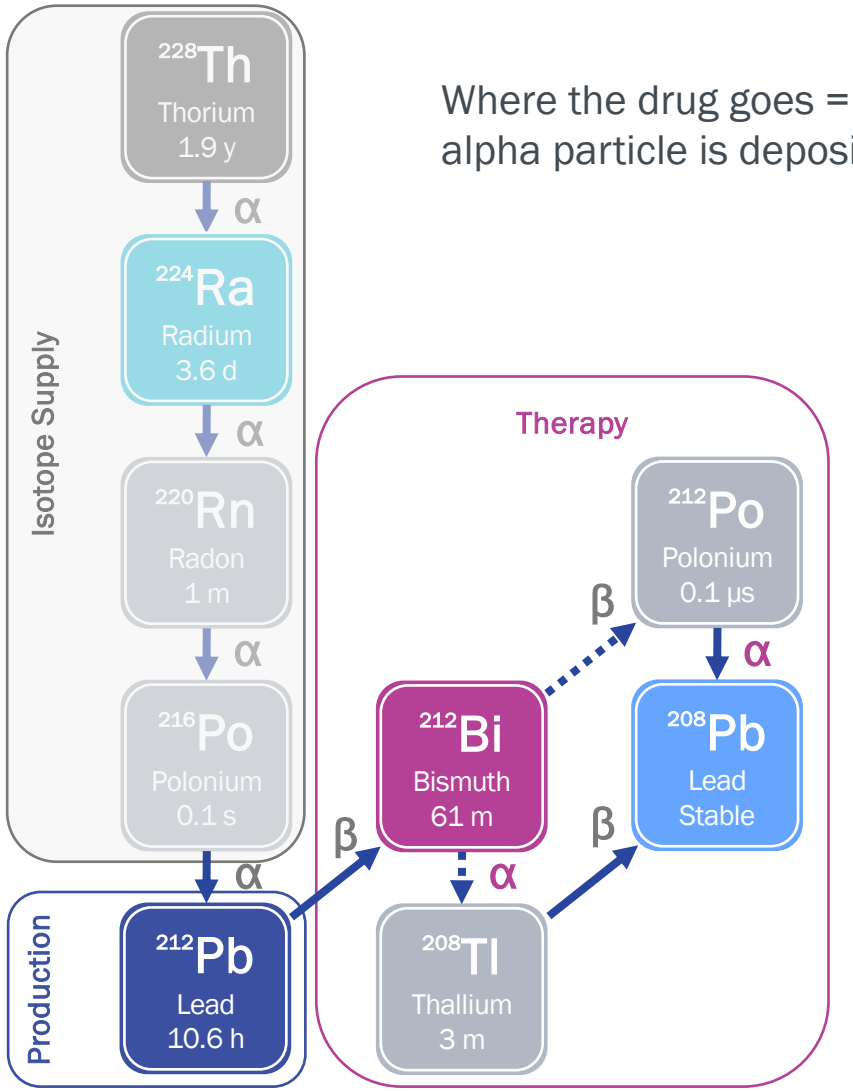
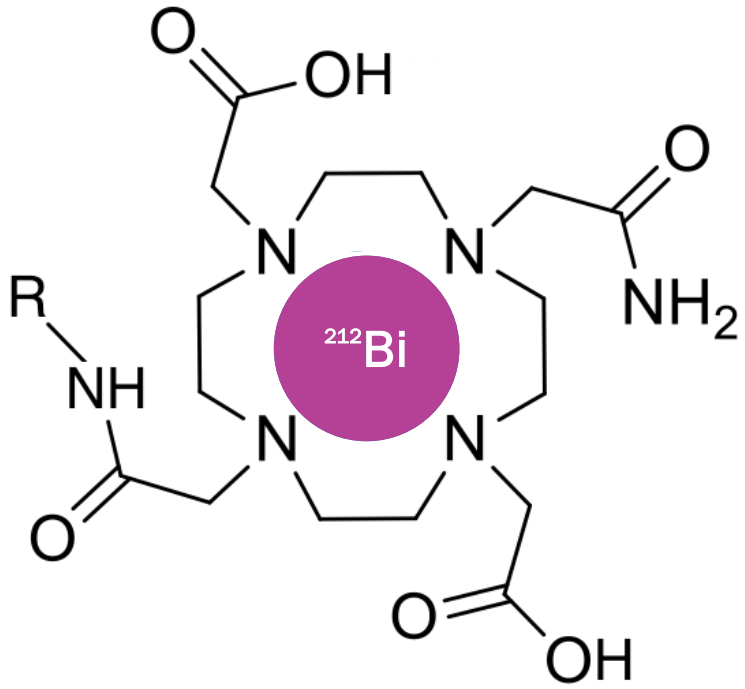
^{212}Pb Isotope Decay Chain and Importance of the Pb-Specific Chelator



Where the drug goes = where the alpha particle is deposited



- Perspective's proprietary chelator retains 98% of ^{212}Bi after transition in drug formulation
- Generic chelators leak the ^{212}Bi alpha-emitting daughter up to 36%[1]

[1]Mirzadeh et al., Radiochimica Acta, 1993

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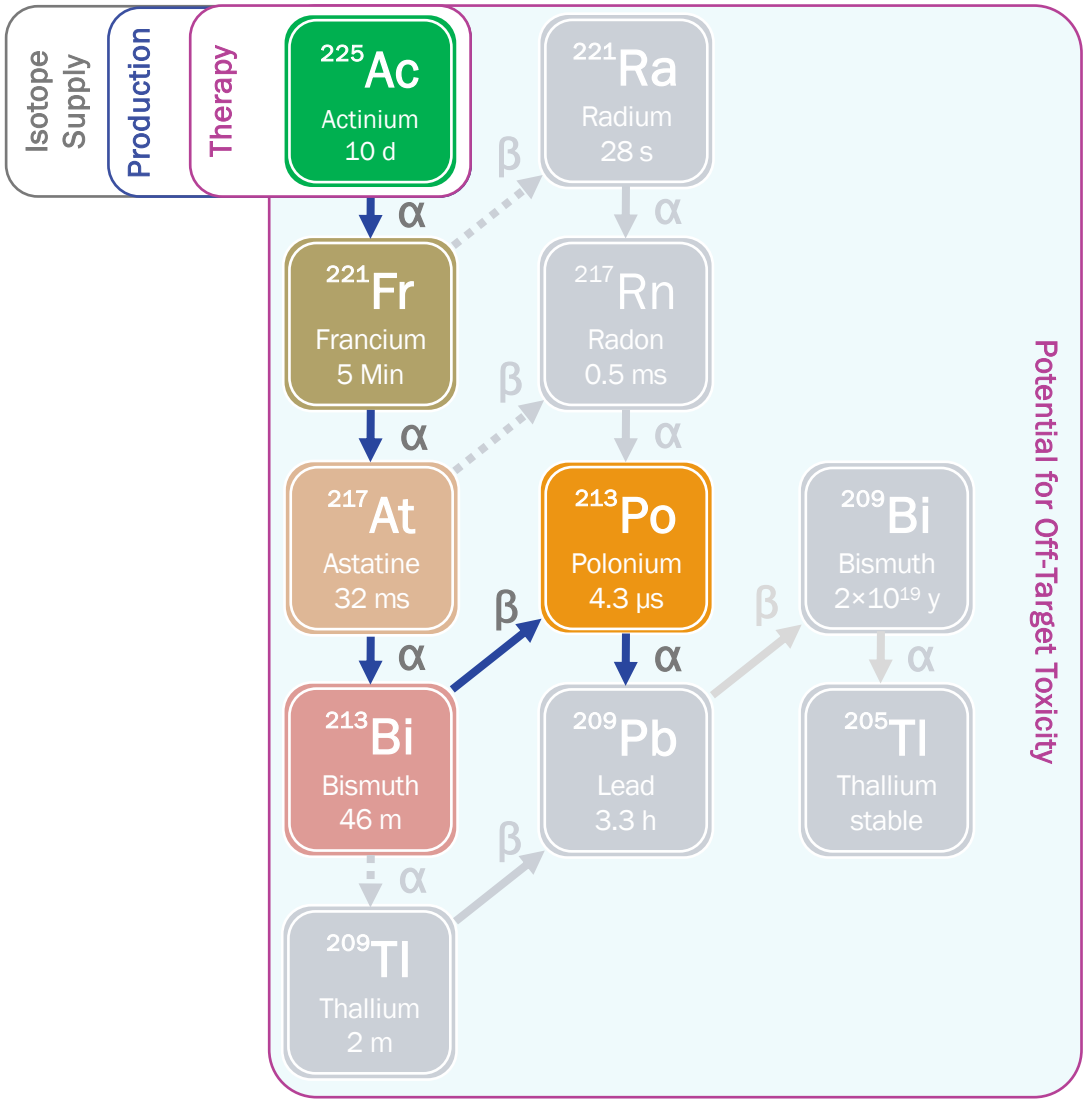
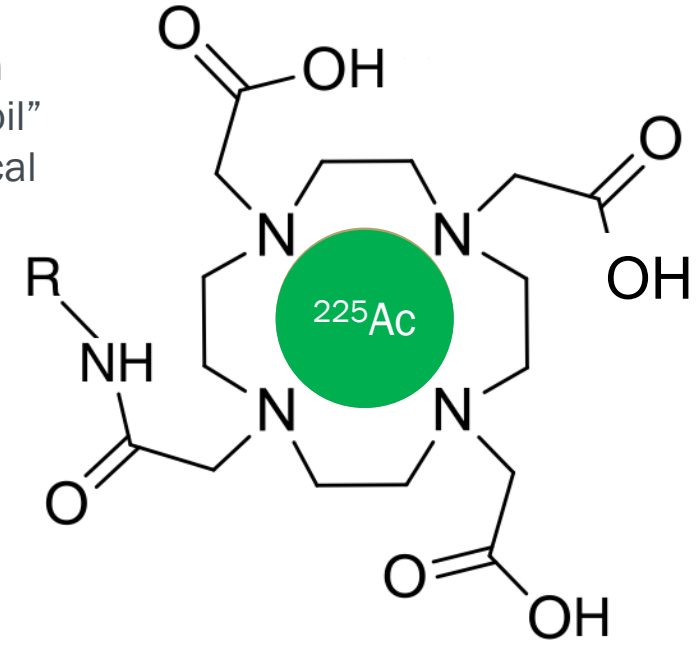
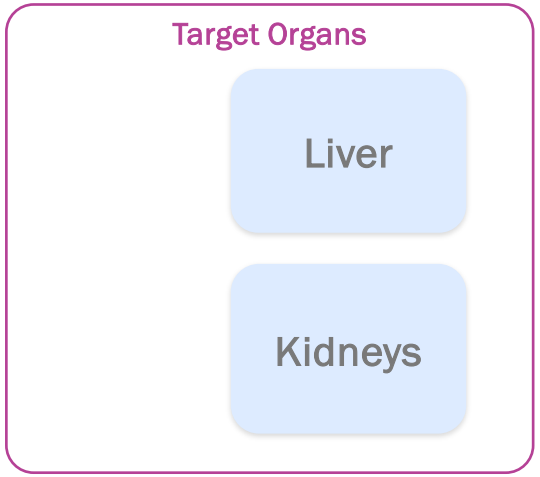
^{225}Ac Isotope Decay Chain and Potential for Off-Target Toxicity



Alpha-particle emission imparts sufficient "recoil" energy to break chemical bonds





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Summary

Thank you!

- **Cancer targeted alpha-particle radionuclide therapy for cancer emerging as a potent approach to cancer treatment**
- **^{212}Pb has ideal properties for cancer therapy**
- **Imaging of ^{203}Pb and ^{212}Pb are powerful tools for radiopharmaceutical development and patient care**
- **Decay series of alpha-particle emitters has presented a measurement challenge to the metrology community**