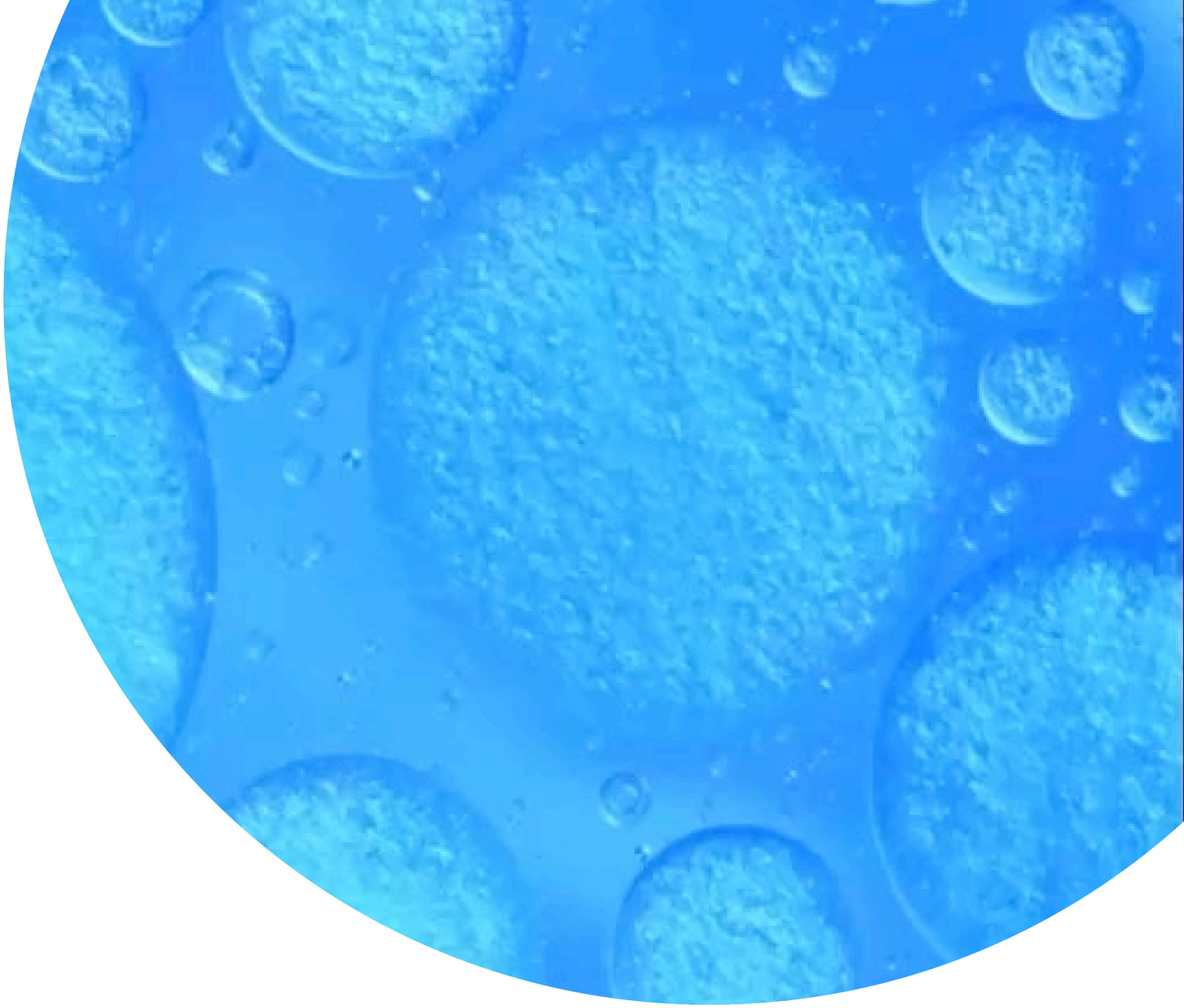
CELLECTAR BIOSCIENCES

Corporate Presentation

NASDAQ: CLRB



September 2025

Forward-Looking Statements and Disclaimers

This presentation contains forward-looking statements. Such statements are valid only as of today, and we disclaim any obligation to update this information. These statements are only estimates and predictions and are subject to known and unknown risks and uncertainties that may cause actual future experiences and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Factors that might cause such a material difference include our ability to pursue strategic alternatives; our current views with respect to our business strategy, business plan and research and development activities; the progress of our product development programs, including clinical testing and the timing of commencement and results thereof; our projected operating results, including research and development expenses; our ability to continue development plans for CLR 121225, CLR 121125, CLR 1900 series, CLR 2000 series, and iopofosine I 131 (also known as CLR 131 or iopofosine); our ability to continue development plans for our Phospholipid Drug Conjugates (PDC); our ability to maintain orphan drug designation in the U.S. for iopofosine as a therapeutic for the treatment of lymphoplasmacytic lymphoma/Waldenström macroglobulinemia multiple myeloma, neuroblastoma, osteosarcoma, rhabdomyosarcoma, and Ewing's sarcoma, and the expected benefits of orphan drug status; any disruptions at our suppliers; our ability to advance our technologies into product candidates; our enhancement and consumption of current resources along with ability to obtain additional funding; our current view regarding general economic and market conditions, including our competitive strengths; uncertainty and economic instability resulting from conflicts, military actions, terrorist attacks, natural disasters, public health crises, including the occurrence of a contagious disease or illness, cyber-attacks and general instability; the future impacts of legislative and regulatory developments in the United States on the pricing and reimbursement of our product candidates; our ability to meet the continued listing standards of Nasdaq; assumptions underlying any of the foregoing; any other statements that address events or developments that we intend or believe will or may occur in the future; our ability to receive NDA approval for our iopofosine I 131 program and our ability to commercially manufacture and launch our product candidate if we receive regulatory approval. A complete description of risks and uncertainties related to our business is contained in our current and periodic reports filed with the Securities and Exchange Commission, including our Form 10-K for the year ended December 31, 2024, and our subsequent reports on Form 10-Q.

This presentation includes industry and market data that we obtained from industry publications and journals, third-party studies and surveys, internal company studies and surveys, and other publicly available information. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. Although we believe the industry and market data to be reliable as of the date of this presentation, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data-gathering process, and other limitations and uncertainties. In addition, we do not know all of the assumptions that were used in preparing the forecasts from the sources relied upon or cited therein.

Cellectar's ability to execute the plans and initiatives addressed in this presentation is predicated upon our ability to obtain additional funding

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Cellectar: Overview

Discovering and Developing the Next Generation of Phospholipid Drug Conjugates (PDC's)

- **Validated PDC platform with the capacity to deliver a broad array of oncology therapeutic modalities including radioisotopes**
- **Post Phase 2 Phospholipid Radioconjugate (PRC), iopofosine I 131**
  - Statistically significant Phase 2b CLOVER WaM primary endpoint in Waldenstrom's macroglobulinemia
  - Preparing accelerated approval submission utilizing Phase 2b CLOVER WaM data
  - Granted U.S. FDA Breakthrough Therapy designation and EU EMA PRIME designation
  - Accelerated conditional approval pathway under EMA evaluation; response expected late 3Q/early 4Q 2025
- **Modular delivery platform utilizes any radioisotope to target solid and hematologic tumors**
  - Phase 1 ready Auger emitting therapeutic for TNBC
  - Finalizing IND package for CLR 225 (actinium) program for Phase 1 study
  - Additional preclinical data with targeted radiotherapies, including Lu177, Pb212, At211 and more

Platform Assets Provide Potential for Strategic Partnerships supporting execution of corporate vision and enhance stockholder value

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Phospholipid Drug Conjugate (PDC)

Pipeline and Milestones

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PDC Platform: Therapeutic Modalities

Near Term Focus on Radiotherapeutics

THERAPUTIC MODALITIES	CONJUGATES	ONCOLOGY PAYLOADS
Radioconjugate (PRC)	**Radioconjugate** • Targeted delivery of any radioisotope • Auger, alpha and beta emitters • Iopofosine I 131 - confirmatory study	• Beta emitter (^{131}I, ^{177}Lu, ^{90}Y, ^{67}Cu, etc.) • Alpha emitter (^{211}At, ^{225}Ac, ^{223}Ra, ^{213}Bi, etc.) • Auger emitter (^{125}I, ^{123}I, ^{201}Tl, etc.) • Additional isotopes (^{153}Gd, ^{67}Ga, etc.)
Cytotoxic Molecule (PCC)	**Small-molecule Conjugates** • Observed in vivo tolerability and activity in multiple animal models • Pico and nanomolar activity	• PLK-1 • Seco-duba • MMAF • Collaboration - undisclosed target
Biologics (PPC)	**Peptide and Nanobody Conjugates** • Targeting intracellular pathways that cannot be targeted with small molecules	• Ribosomal peptide • Protein inhibitors • Collaboration - undisclosed target
Nucleic Acid (POC)	**Oligo Conjugates** • Intracellular delivery of nucleic acids providing knockdown or knock-in gene control in cancer cells	• RNAi-/siRNA • mRNA • cDNA • Collaboration - undisclosed target

Extensive intellectual property portfolio; radio-conjugates, small molecules, oligonucleotide payloads and linker technology

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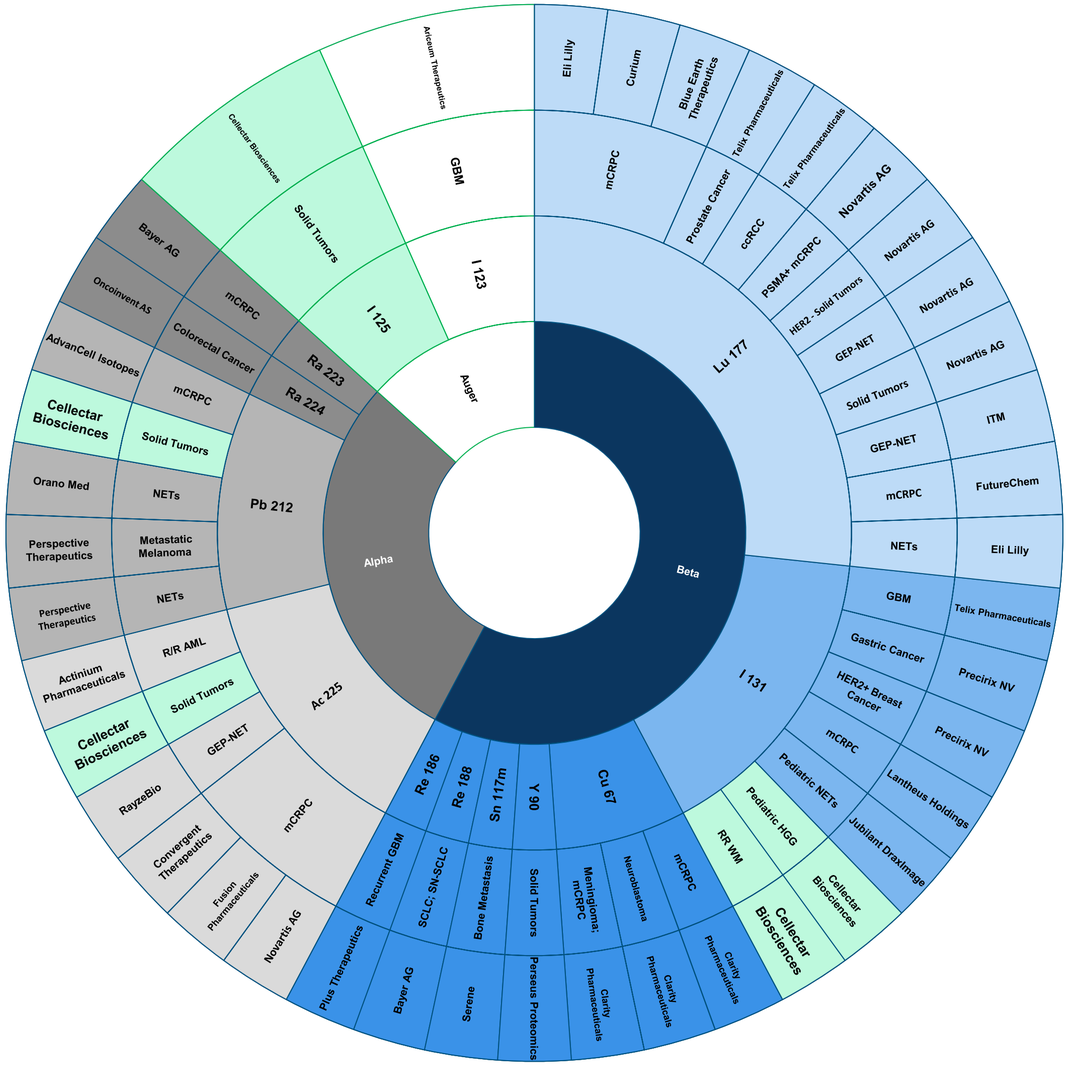
PDC Platform: Evolving Radiotherapeutic Landscape

Despite Significant R&D Investment Limited Indications under Development



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Marketed Radiotherapeutic Indications:

- 2 Prostate Cancer (mPC)
- 1 Neuroendocrine Tumors (GEP-NET)

7

Late-Stage Radiotherapeutic Indications (Population):

- 3 mPC (142,290)
- 3 GEP-NET (29,664)
- 1 r/r WM (11,500)

7

CLRB Radiotherapeutic Indications (Population):

- Pancreatic Cancer (43,824)
- Triple Negative Breast Cancer (~40,540)
- r/r WM (11,500)
- DLBCL
- Multiple Myeloma
- Non-Hodgkin Lymphoma
- Pediatric High-Grade Glioma

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Novel PDC platform designed to allow for treatment of a broad range of oncology indications

PDC Platform: Pipeline

Compound	Disease State	Preclinical	Phase 1	Phase 2	Phase 3
Iopofosine I 131 Iodine-131 β-emitting radioconjugate	Waldenström macroglobulinemia			Clover WaM Phase 2 Study r/r WM	PENDING EMA DETERMINATION OF ACCELERATED APPROVAL PATHWAY TRADITIONAL AA
	b-cell Malignancies			DLBCL, MM & NHL	
	Pediatric High-grade Glioma		Phase 1b		
CLR 121125 Iodine-125 Auger-emitting radioconjugate	Solid Tumor - TNBC	Phase 1b – 2a Ready			
CLR 121225 Actinium-225 α-emitting radioconjugate	Solid Tumor - Pancreatic	Phase 1b Ready			
Early Pipeline	Alpha Emitters (^{211}At, ^{212}Pb, ^{223}Ra)	Phase 1b Ready			
	Beta Emitters (^{177}Lu, ^{90}Y, ^{67}Cu)				

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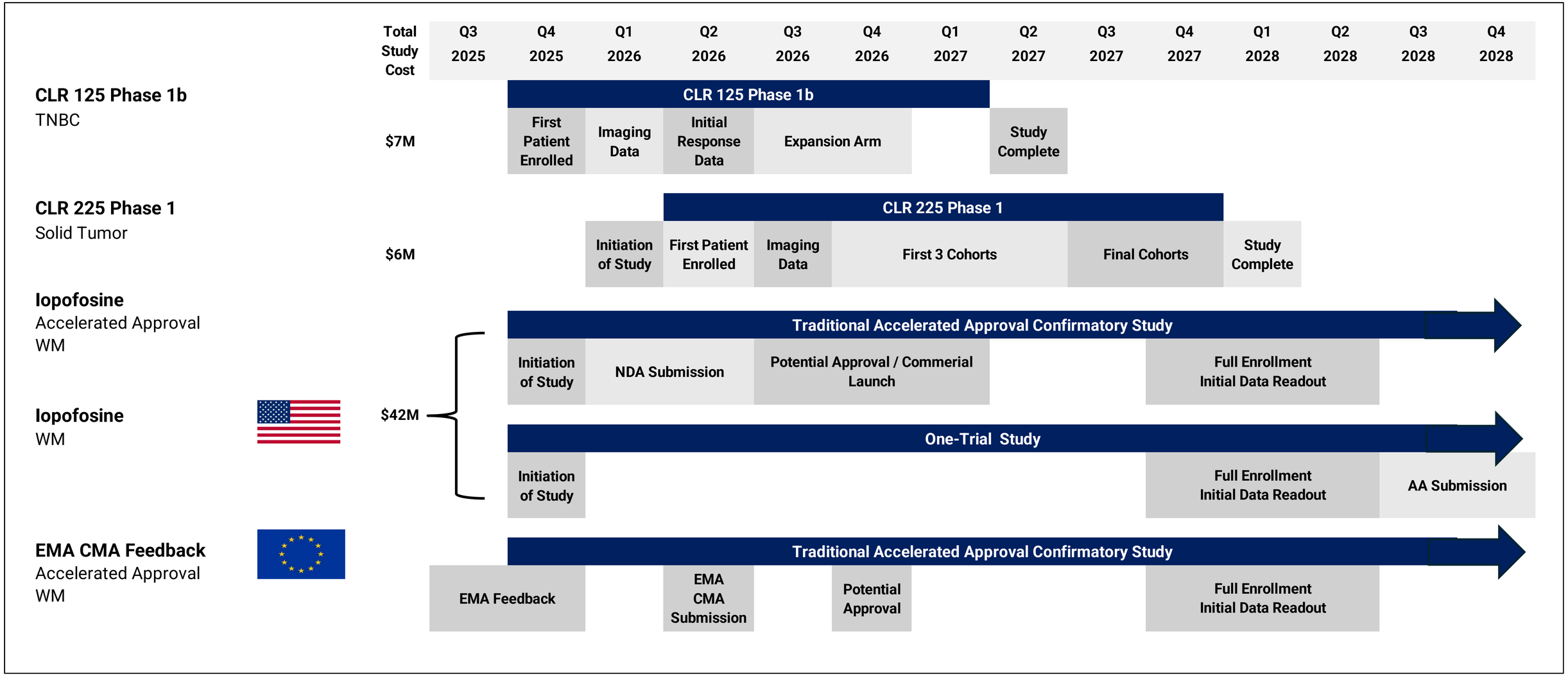
PDC Platform: Anticipated & Potential Milestones



Initiation of Phase 1 TNBC Study Planned 4Q 2025

PDC Platform: Iopofosine I 131 NDA Submission Strategy

Rationale: Recent Receipt of BTD, Phase 2 Clinical Data (1 year plus follow up & post BTKi subset analysis) with FDA Philosophical Shift

Submit NDA for Accelerated Approval Post Initiation of Confirmatory Study

Primary Approach:
Accelerated Approval Submission
Based Upon Phase 2b CLOVER WaM Study

- Initial Label: Two prior lines including a BTKi
- Initial Market size: 5700[3] patients
- Proposed Confirmatory Study
  - Randomized controlled study
  - Second line post BTKi
  - ~ 200 patients at 100 per arm
  - Endpoint: PFS
- Final Label: Post BTKi (second line: 11,500[3])

Secondary Approach (if required):
Accelerated Approval Submission
Based Upon One Trial Design MRR

- Initial Label: Post BTKi (second line)
- Initial Market size: ~11,500[3] patients
- Proposed One Trial Design
  - Randomized controlled study
  - Second line post BTKi
  - ~ 200 patients at 100 per arm
  - Endpoint: MRR = AA; PFS = full approval
- Final Label: Post BTKi (second line)

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Phospholipid Drug Conjugate (PDC)

Platform Mechanism of Action (MOA)

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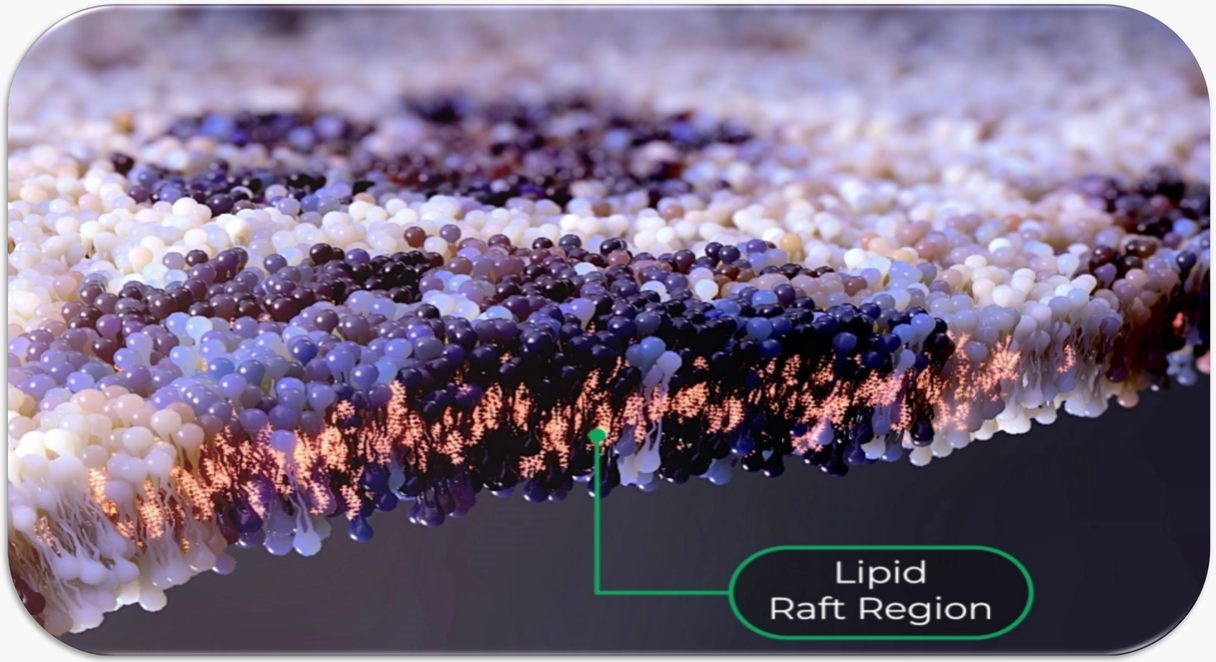
PDC Platform MOA: Lipid Rafts

The Role of Lipid Rafts as a Universal Target in Cancer



Lipid Rafts:

Specialized microdomains within the plasma membrane play a significant role in cancers by facilitating processes like cell signaling, proliferation, survival, invasion, metastasis, and drug resistance. The enriched presence of cholesterol, sphingolipids, and specific proteins in these microdomains enhances the ability of tumor cells to thrive in challenging environments

Lipid Rafts Play an Influential Role in Cancer

Enhanced oncogenic signaling

- Concentrate and stabilize growth factor receptors

Survival and resistance to apoptosis

- Help cancer cells survive and escape programmed cell death

Cancer invasion and metastasis

- Facilitate cancer cell migration, invasion, and metastasis

Targeting cancer

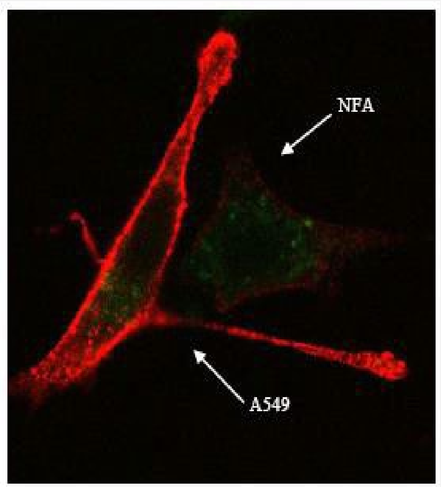
- High prevalence on tumor cells vs. healthy tissue
- Stabilize for approximately 10 days in tumor cells compared to milliseconds for healthy tissue
- Uniformly present across tumor cells and tumor types

PDC Platform MOA: Lipid Rafts Mediate Entry into Tumor Cells

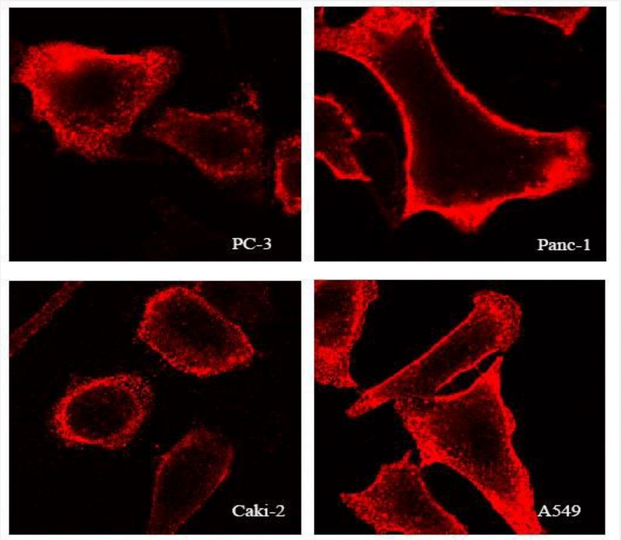
Overabundance of Lipid Rafts on Tumor Cells

Lipid Rafts Fluorescent-labeled with Cholera Toxin Subunit

A549 labeling vs Fibroblast Co-cultured



Prostate **Pancreatic**

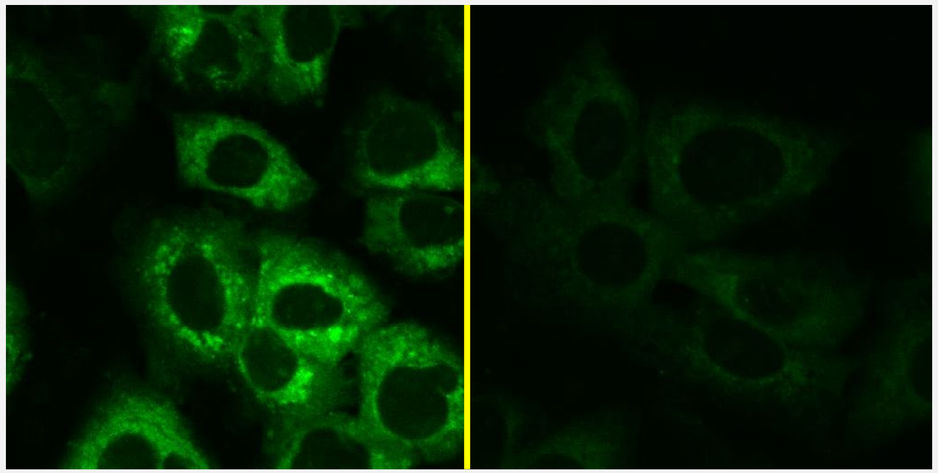


Kidney **Lung**

Red = labeled lipid rafts

Methyl-β-cyclodextrin (MBCD) Selectively Disrupts Lipid Rafts

A549 NSCLC



No MBCD pretreatment
Intact lipid rafts

MBCD pretreatment
Disrupted lipid rafts
Uptake decreased by ~60%

Green = fluorescent tagged PDC

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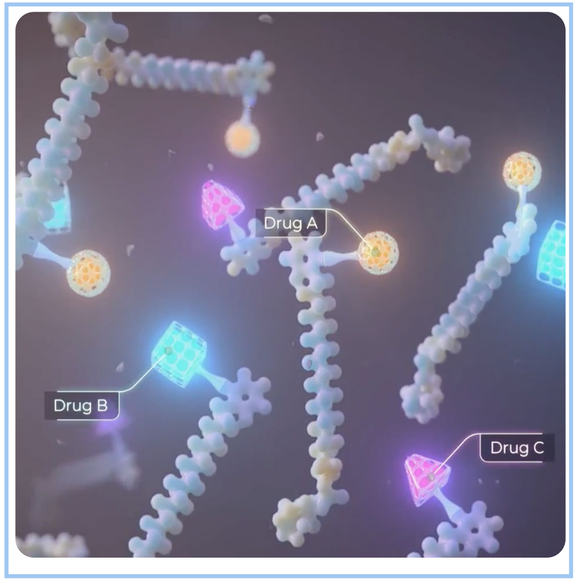
Targeting and Uptake by Lipid Rafts Proof of Concept

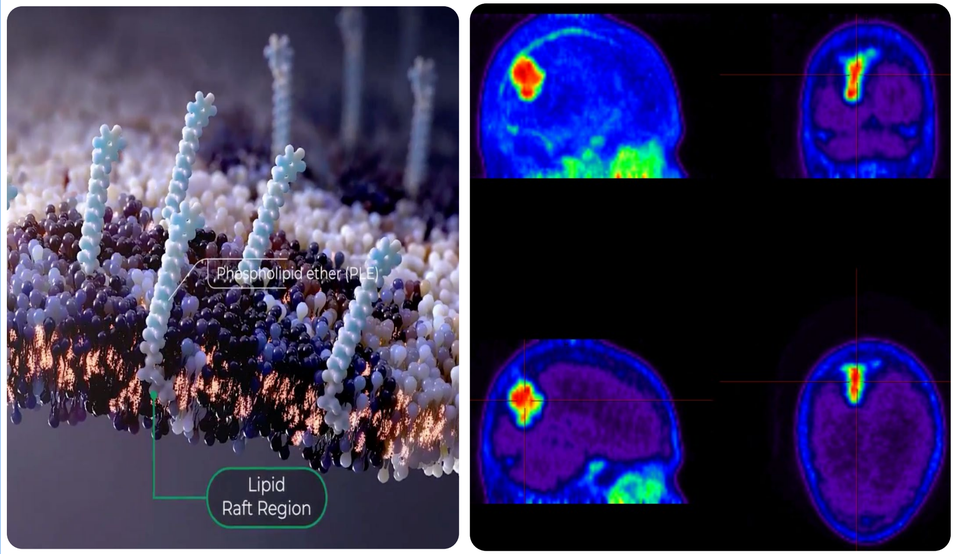
PDC Platform MOA: Profile

Universal Targeting with Diverse Payloads

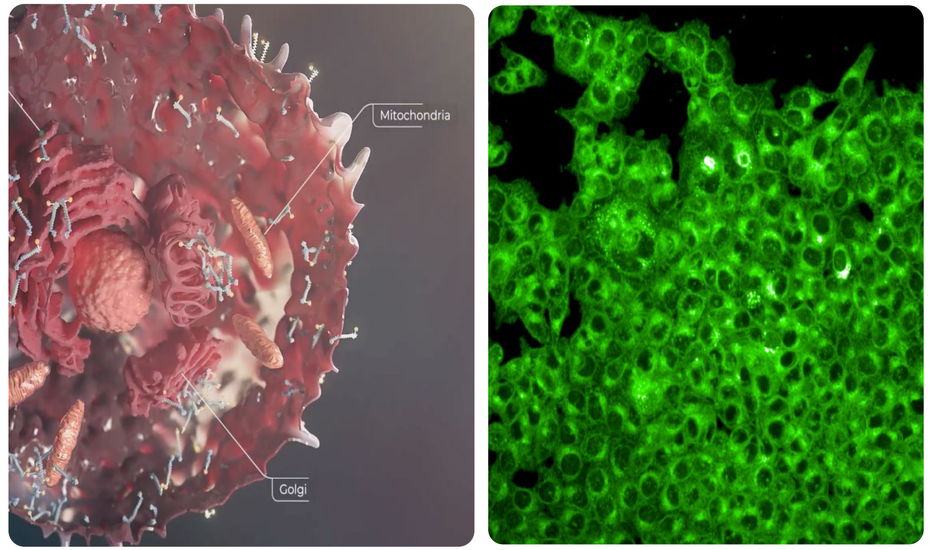
PDC CONTAINING DESIRED PAYLOAD WITH TUMOR-TARGETING PHOSPHOLIPID ETHER



SPECIFIC TARGETING OF LIPID RAFT ON CANCER CELL MEMBRANE



INTERCELLULAR DELIVERY AND RELEASE OF PAYLOAD BY TRANSMEMBRANE FLIPPING OF LIPID RAFT



PROFILE	DIVERSE PAYLOAD	PAN-CANCER TARGETING	CANCER SPECIFIC TARGET	RAPID UPTAKE	CNS PENETRATION	CYTOPLASMIC ENTRY
Phospholipid Drug Conjugate[1] (PDC)	✓	✓	✓	✓	✓	✓

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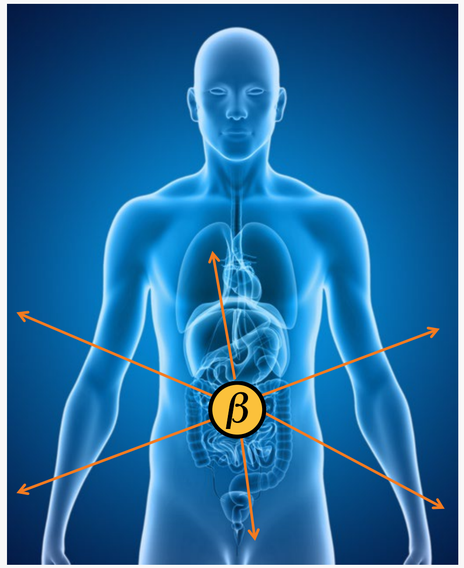
PDC Platform MOA: Utility Provides Competitive Advantage

Ability to Use a Broad Range of Radiotherapeutic Emitters

Beta Emitting



Radiation Provides Therapeutic Bystander Effect

- Enhanced anti-tumor immune response

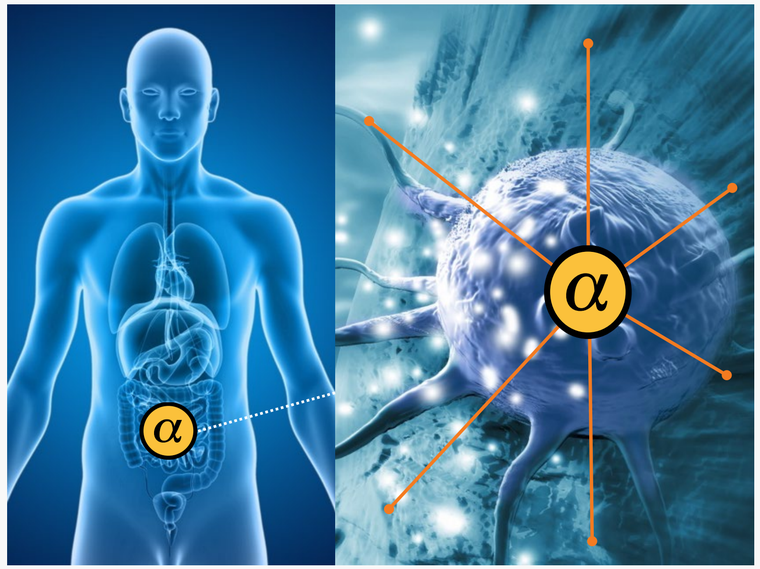
Our Isotopes

- I-131, Lu-177, Y-90

Targets

- WM, MF, iNHL, pHGG, MM, Prostate, etc

Alpha Emitting



Radiation Confined to Tumor Environment

- Enhanced adjacent tumor cell death

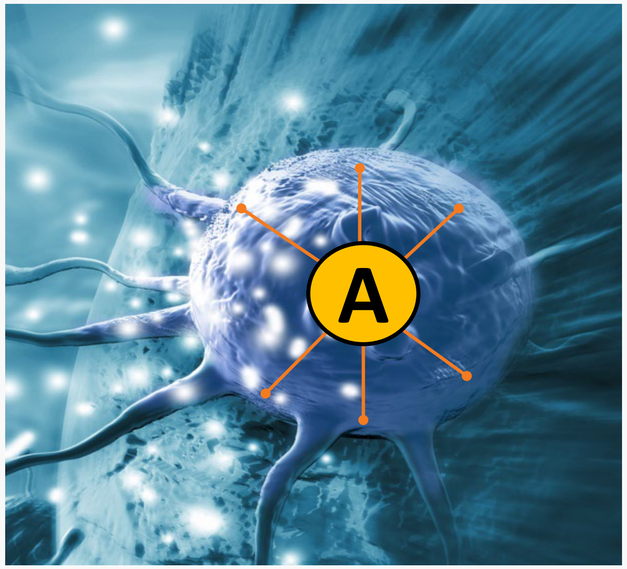
Our Isotopes

- Ac-225, At-221, Ra-223, Pb-212

Targets

- Pancreatic, Ovarian, etc

Auger Emitting



Radiation Confined to Tumor Cell

- Enhanced precision improves therapeutic index

Our Isotopes

- I-125, I-123

Targets

- Triple negative Breast, Lung, etc

PDC Platform Provides Rapid Isotope Comparison and Selection

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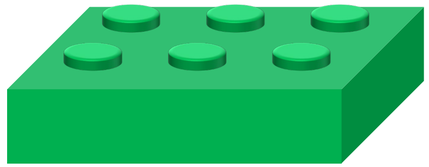
PDC Platform MOA: Validated Clinically and Preclinically

Enabling Treatment of Tumors through Enhanced Targeting and Novel Payloads

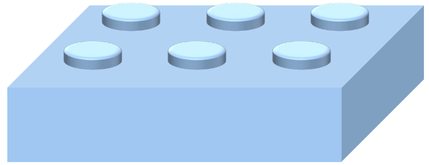
Clinical Proof of Concept

Iopofosine I 131 **Phase 2 data** in WM (**~84% ORR**) and other hematologic indications



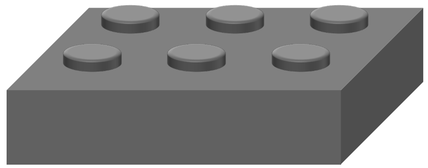
Broad Radio-conjugate Proof of Concept

***In vivo* activity** in multiple tumor types with radioisotopes; Lutetium, Actinium, Lead, Astatine, Iodine and others



Novel Payload Proof of Concept

Demonstrated preclinical ***in vivo* activity** with small molecules, oligonucleotides, and peptides



Targeting and Uptake Proof of Principle

Clinical and *in vivo* imaging and dosimetry data demonstrates **targeting and uptake**

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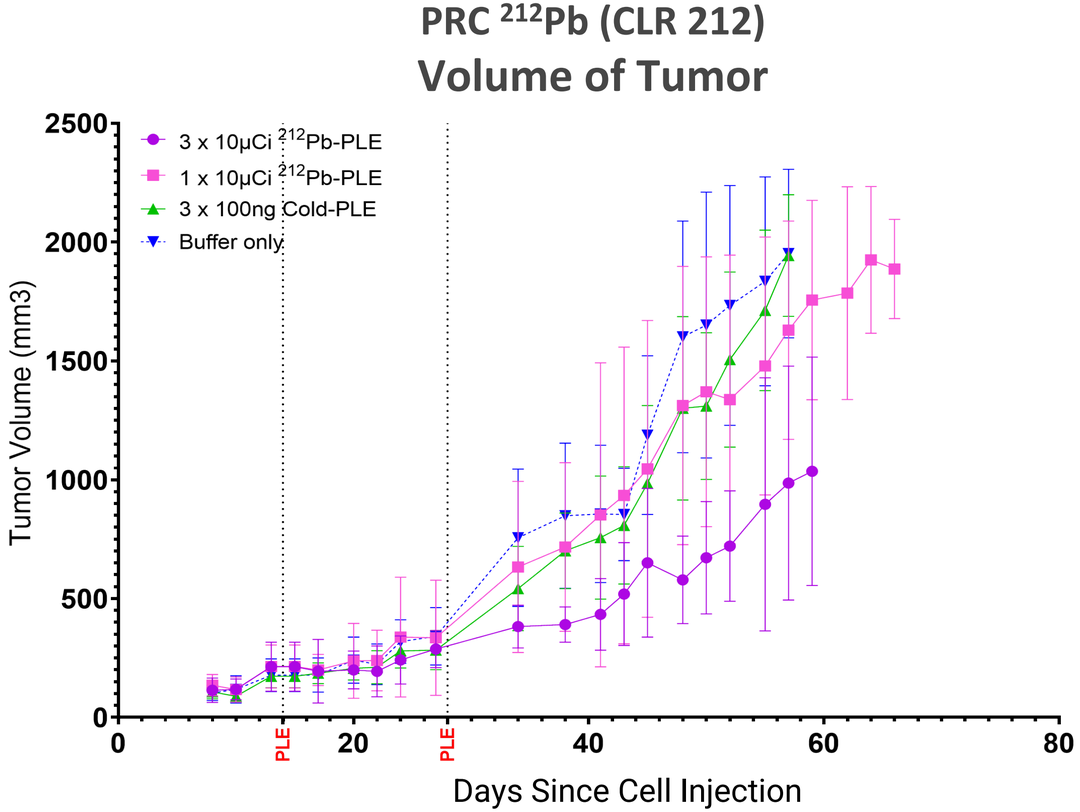
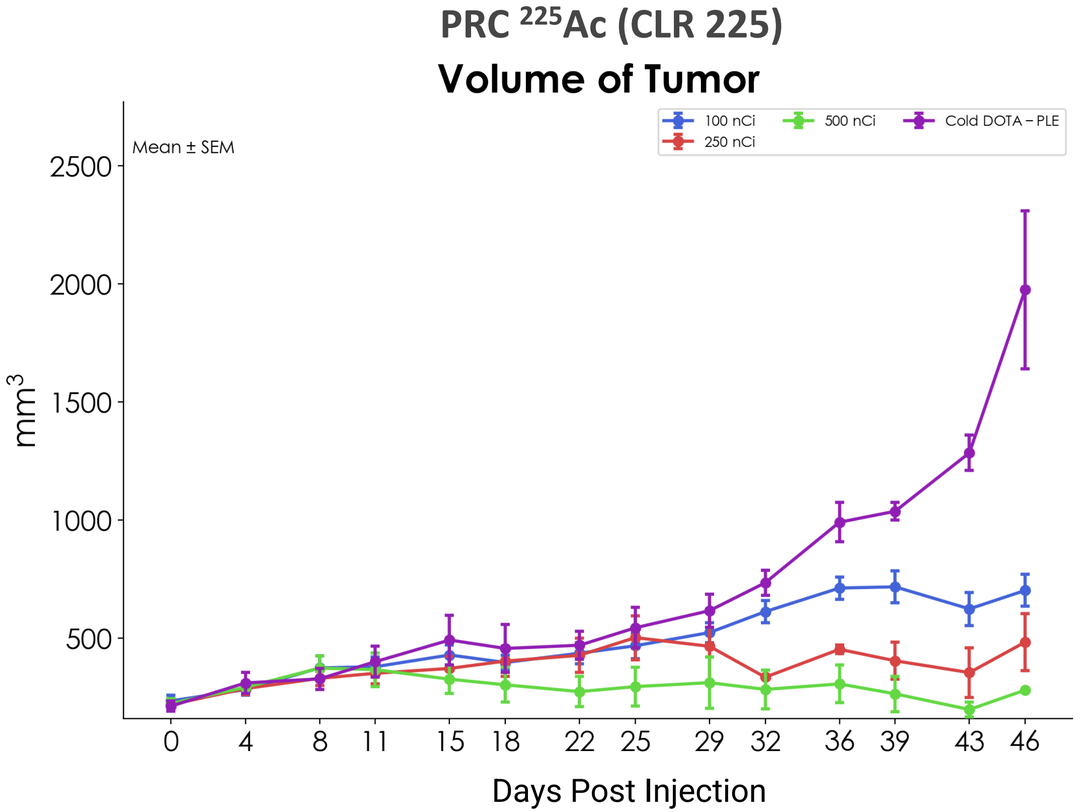
PDC Platform MOA: Allows for Rapid Determination of Right Isotope

Evaluation of 212Pb-PRC vs 225Ac-PRC in Pancreatic Cancer (BxPC3)





- Clear activity with both alpha emitters
- Actinium outperforms Lead in pancreatic cancer
- Different isotopes have better outcomes in different models

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Selection of the Right Isotope for the Right Job Optimizes Outcomes

Phospholipid Radioconjugate (PRC) Program

Manufacturing and Distribution

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Manufacturing & Supply Chain

Multi-sourced Network Enables Uninterrupted Supply

- Redundancy provides seamless & secure supply
- GMP API sourced in kilogram scale providing >5 years of supply
- CMOs provide overlapping regional supply centers
- Every isotope is multi-sourced to guarantee sufficient supply
- Optimized formulations provide potential “off-the-shelf” convenience

Global Distribution Network Provides Drug to Patients within 48 hours

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Phospholipid Radioconjugate (PRC) Program

Auger Emitter

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PRC Program: Properties of Different Emitters Provide Enhanced Outcomes

Microenvironment, Tumor Biology & Isotope Properties Drive Safety and Efficacy

	Composition	Primary Mechanism of Cell Death	Penetrating Power (Emission Distance)	Relative Biologic Effect
Alpha Particles	2 protons 2 neutrons	Double strand DNA breaks	50 – 100um (80-100 keV/μm)	~5
Beta Particles	1 electron	Single strand DNA breaks	12mm (~0.2 keV/mm)	1
Auger Electrons	Multiple electrons	Double strand DNA breaks	2 – 500nm (4-26 keV/μm)	1 – 5

- Short penetrating power, requires intracellular delivery to be effective
- Similar cell damage as alpha emitters – double strand and multi-base pair DNA breaks
- Additional activity from reactive oxygen species, designed to provide enhanced immune stimulation
- Short emission distance limits off target effects and adverse events

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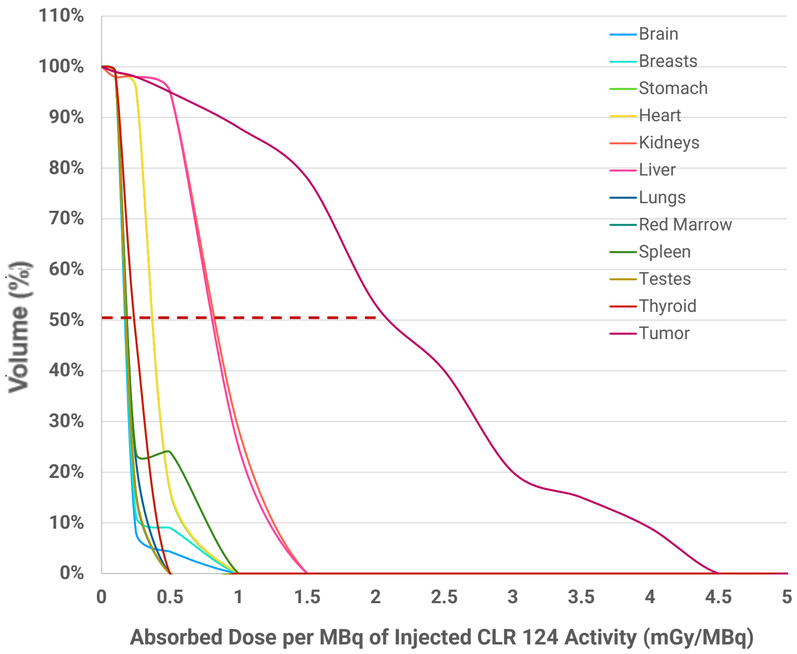
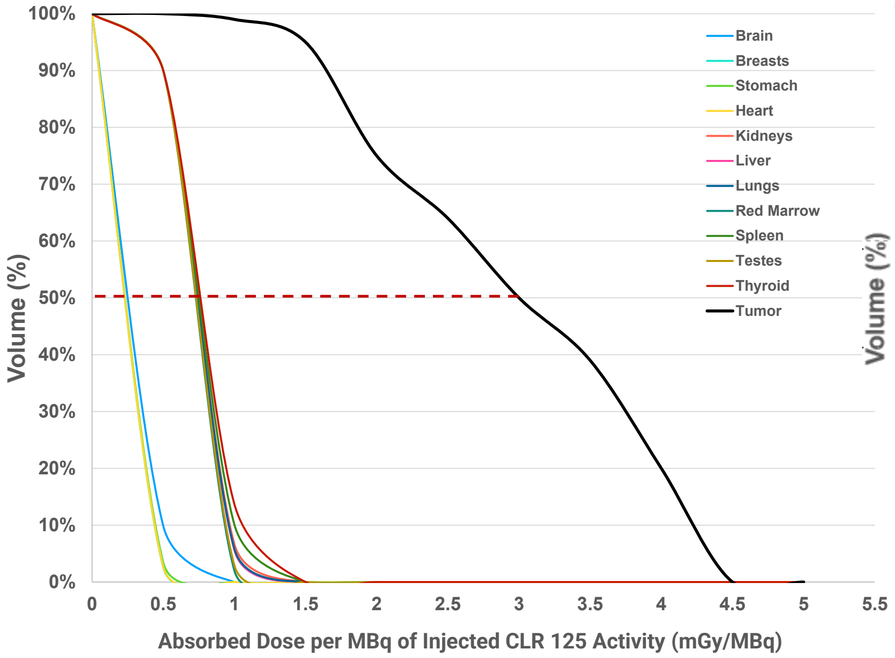
PRC CLR 121125 (CLR 125): Auger Emitter (^{125}I)

Enhanced Tumor Absorbed Dose Results in Increased Cell Killing

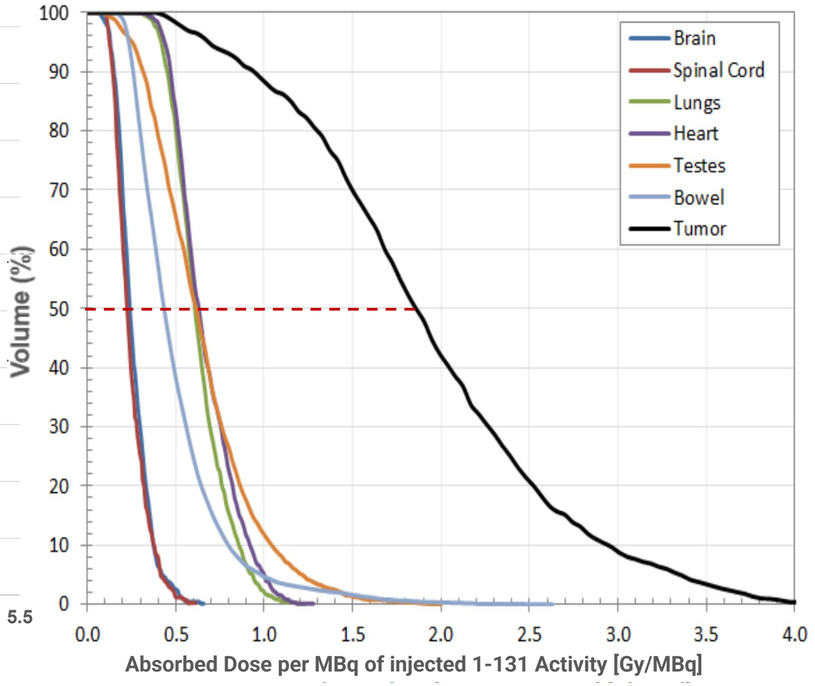
CLR 124



CLR 125



CLR 131



- Isotope half-life can drive absorbed dose (targeting ligand PK, uptake and retention key)
- Tumor absorbed dose versus normal tissue = therapeutic window

CLR 121125 Demonstrated Greatest Tumor and Lowest Normal Tissue Absorbed Dose

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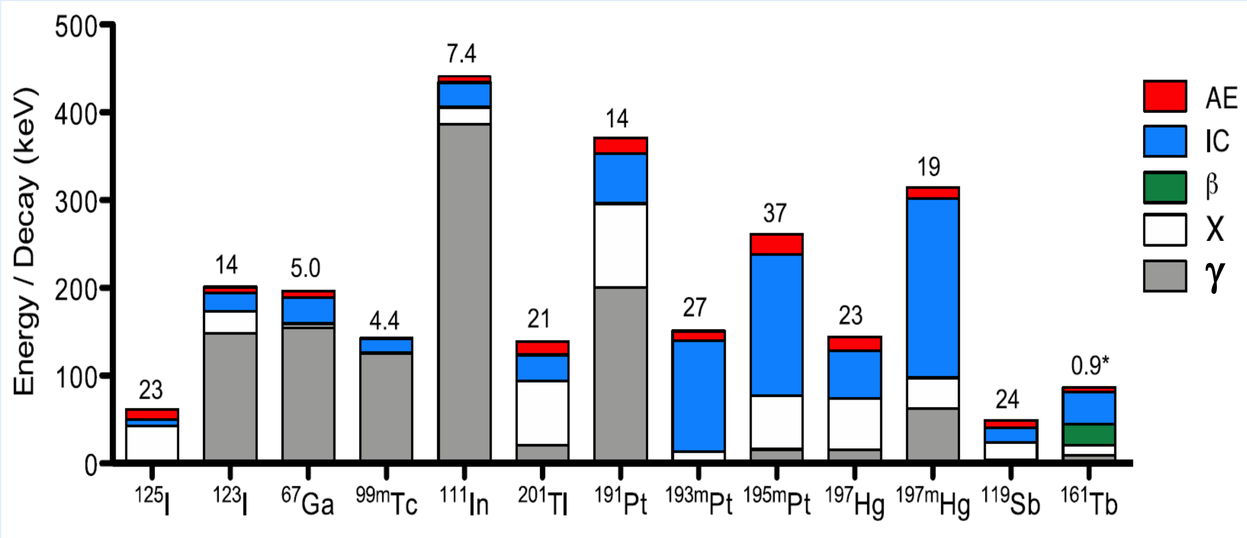
PRC CLR 121125 (CLR 125): Auger Emitter (^{125}I)

Offers Benefits Vs Other Auger Emitters



AE = Auger electron

X = X-ray

IC = internal conversion

γ = gamma emission

β = beta electron emission

Why I-125?

- One of the highest Auger electron emitters
- 57-day half-life enhanced outcomes
- No Beta or Gamma emissions observed

Existing data set supports entry into Phase 1b/2 clinical study

- Initial indication Triple negative breast cancer
- 3 dosing groups exploring multiple cycles with an expansion arm
- Primary endpoint: Phase 2b dose selection

High Electron Delivery With Cleaner Emissions, Optimized Safety and Ease of Use

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PRC CLR 121125 (CLR 125): Auger Emitter (^{125}I)

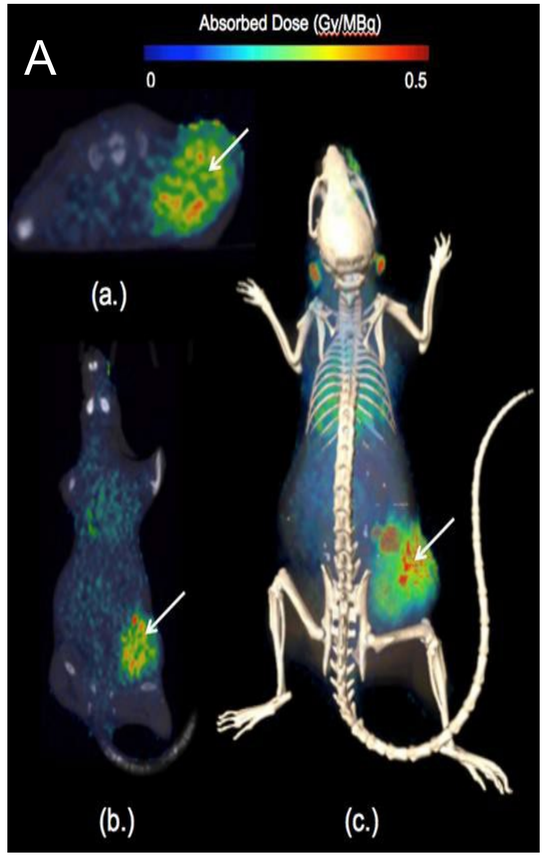
Observed Statistically Significant Activity and Well Tolerated *In Vivo*

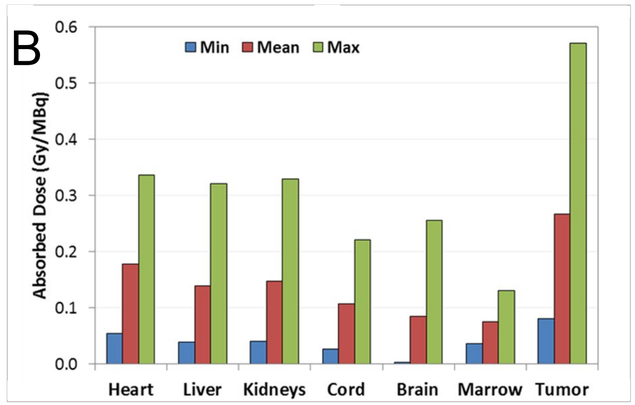
CLR 125 structurally identical to iopofosine I 131; potentially reduced development risk

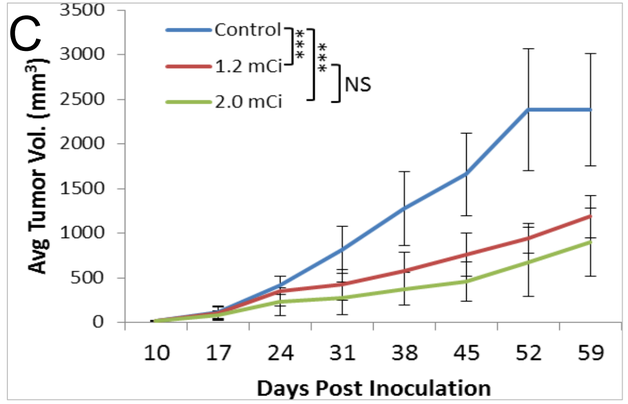
CLR 125 tested in MDA-MB-231 triple negative breast cancer

- Observed significant tumor uptake (images A & B)
- Single infusion resulted in growth inhibition at both tested doses (1.2mCi and 2mCi) – Image C
- Observed statistically significant activity at 2mCi dose - data not shown

No signs of end-organ toxicity, including hematologic toxicity







Validated Intracellular Delivery with CLR 121125

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PRC CLR 121125 (CLR 125): Auger Emitter (^{125}I)

Phase 1b Dose Finding Study in relapsed Triple Negative Breast Cancer

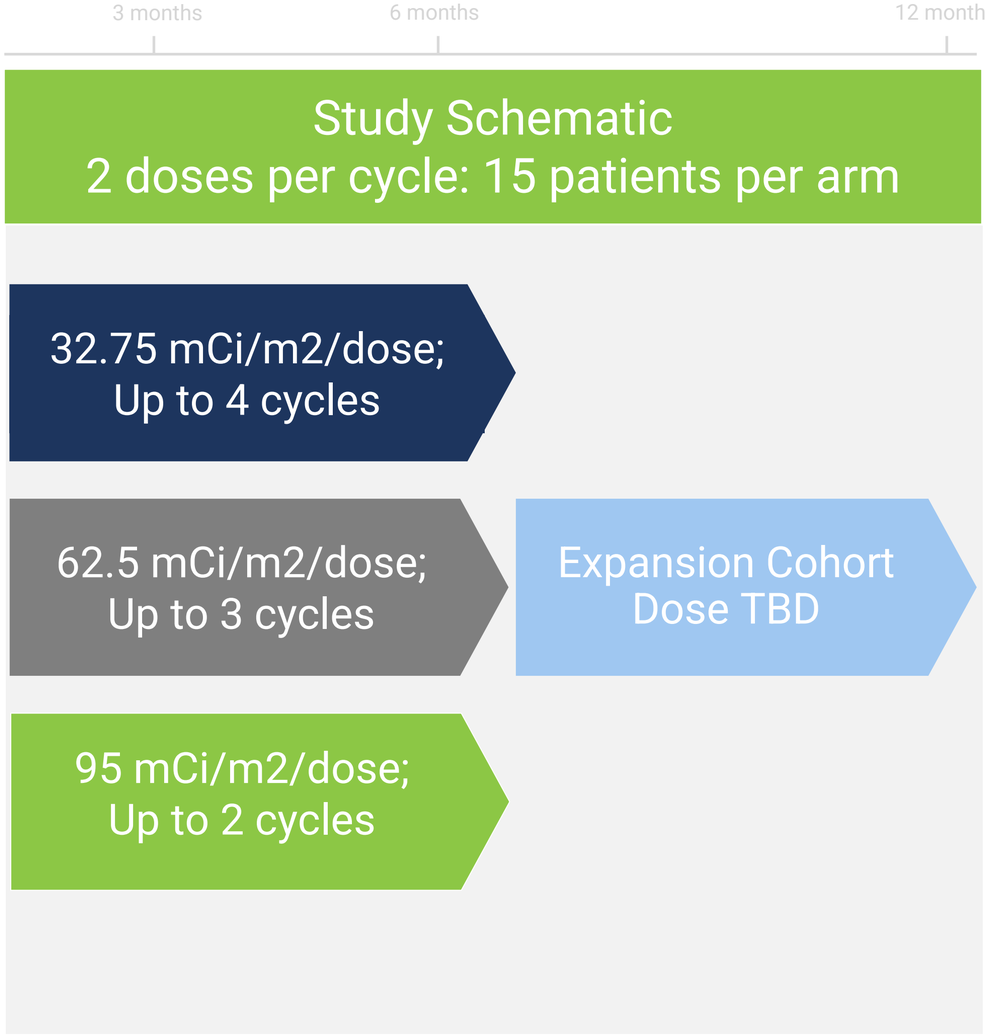
Phase 1 Study Overview

- Imaging and therapy study
- Population: TNBC patients with progressive disease and no treatment option
- Primary Endpoint: Recommended Phase 2 dose
- Secondary Endpoints: Safety & tolerability; initial response assessment (RECIST v1.1 and PFS); distribution
- Dose determination based upon preclinical data and imaging results

Key Inclusion/Exclusion Criteria

- Confirmed TNBC
- Relapsed from at least 1 prior treatment
- At least 1 measurable lesion of >10mm
- No ongoing Grade 2 or greater adverse events
- At least 2 weeks since prior antitumor treatment

Study Schematic
2 doses per cycle: 15 patients per arm



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Phospholipid Radioconjugate (PRC) Program

Alpha Emitters

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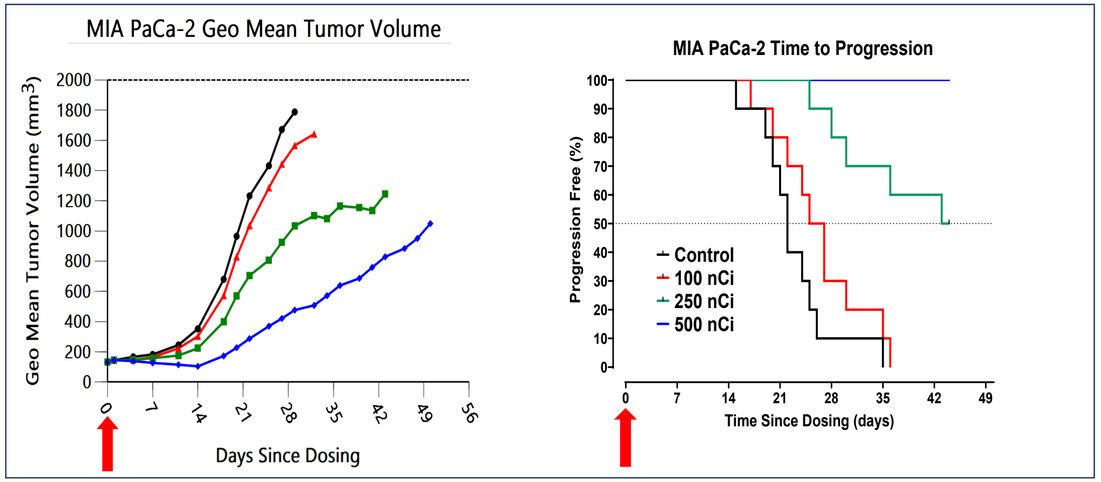
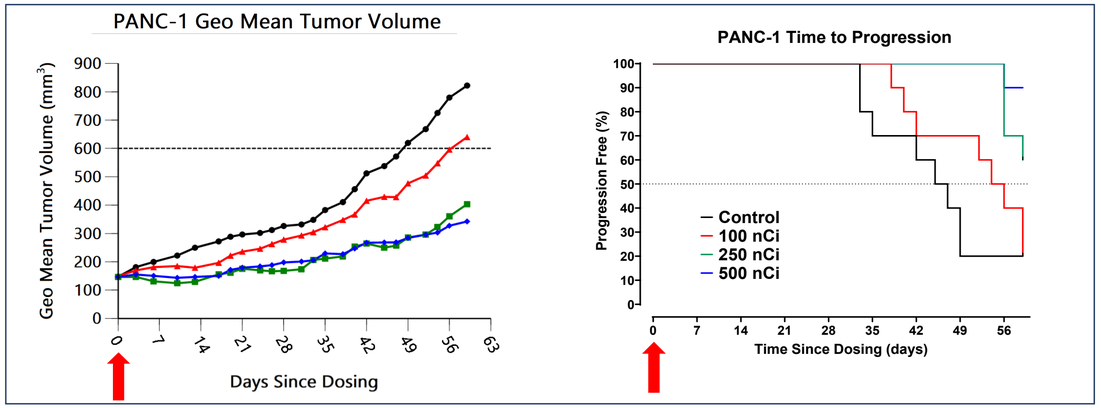
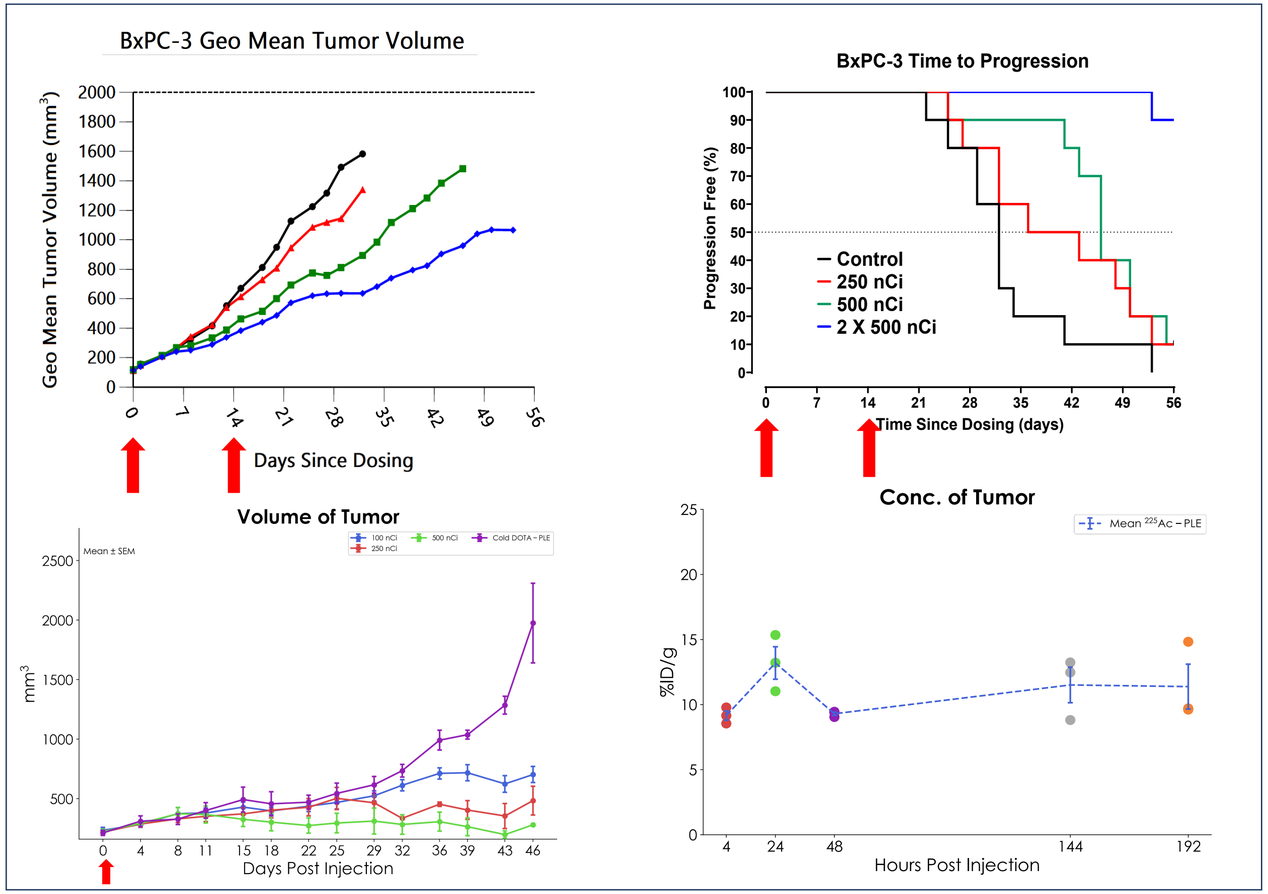
PRC CLR 121225 (CLR 225): Alpha Emitter (^{225}Ac)

Tumor Volume Reduction and Survival Benefit in Pancreatic Cancer







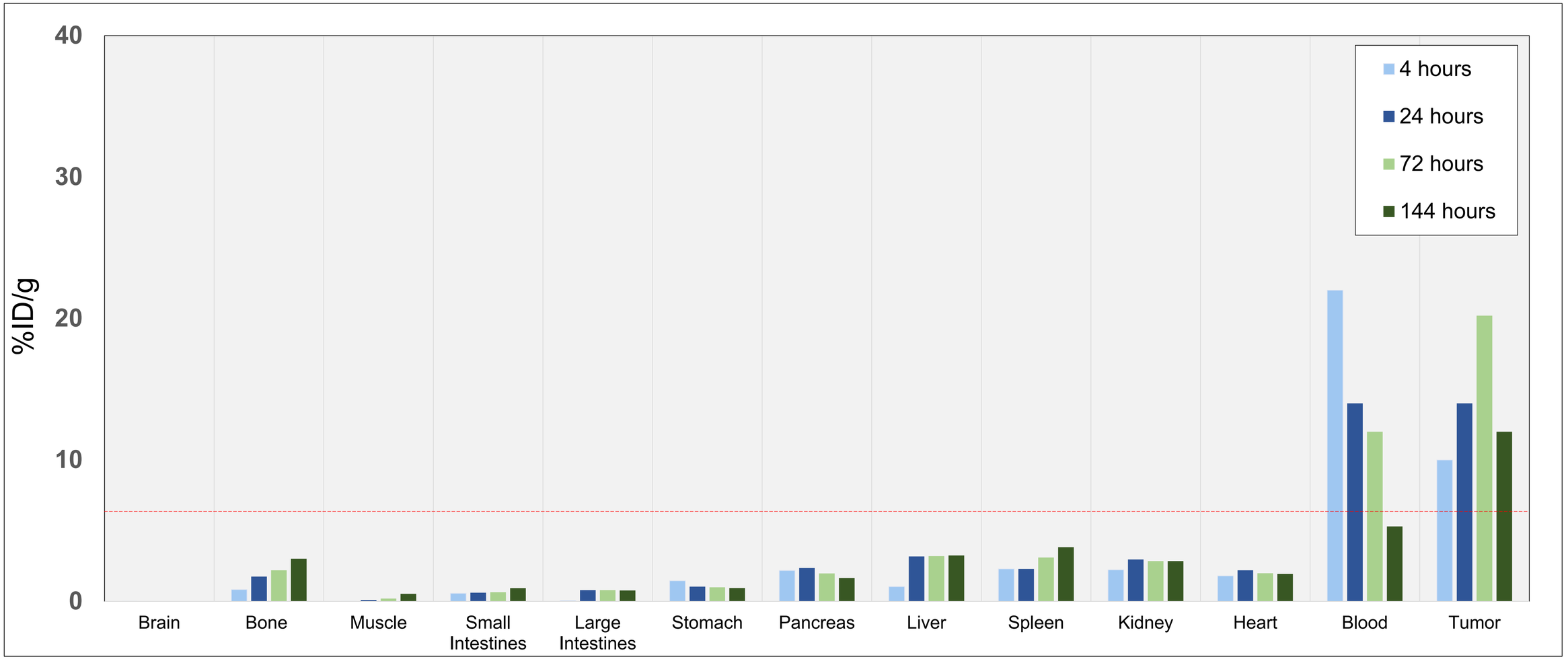
- 3 xenograft models of pancreatic cancer
- Dose response exhibited in all models (Cold, 100nCi, 250nCi and 500nCi)
- Tumor volume reduction and survival benefit observed in every model

CELLECTAR BIOSCIENCES

Observed Tumor Volume Reduction and Survival Benefit at All Doses and All Doses Tolerated

PRC CLR 121225 (CLR 225): Alpha Emitter (^{225}Ac)

Biodistribution in Pancreatic Model



High and Prolonged Tumor Uptake; Low Normal Tissue Uptake

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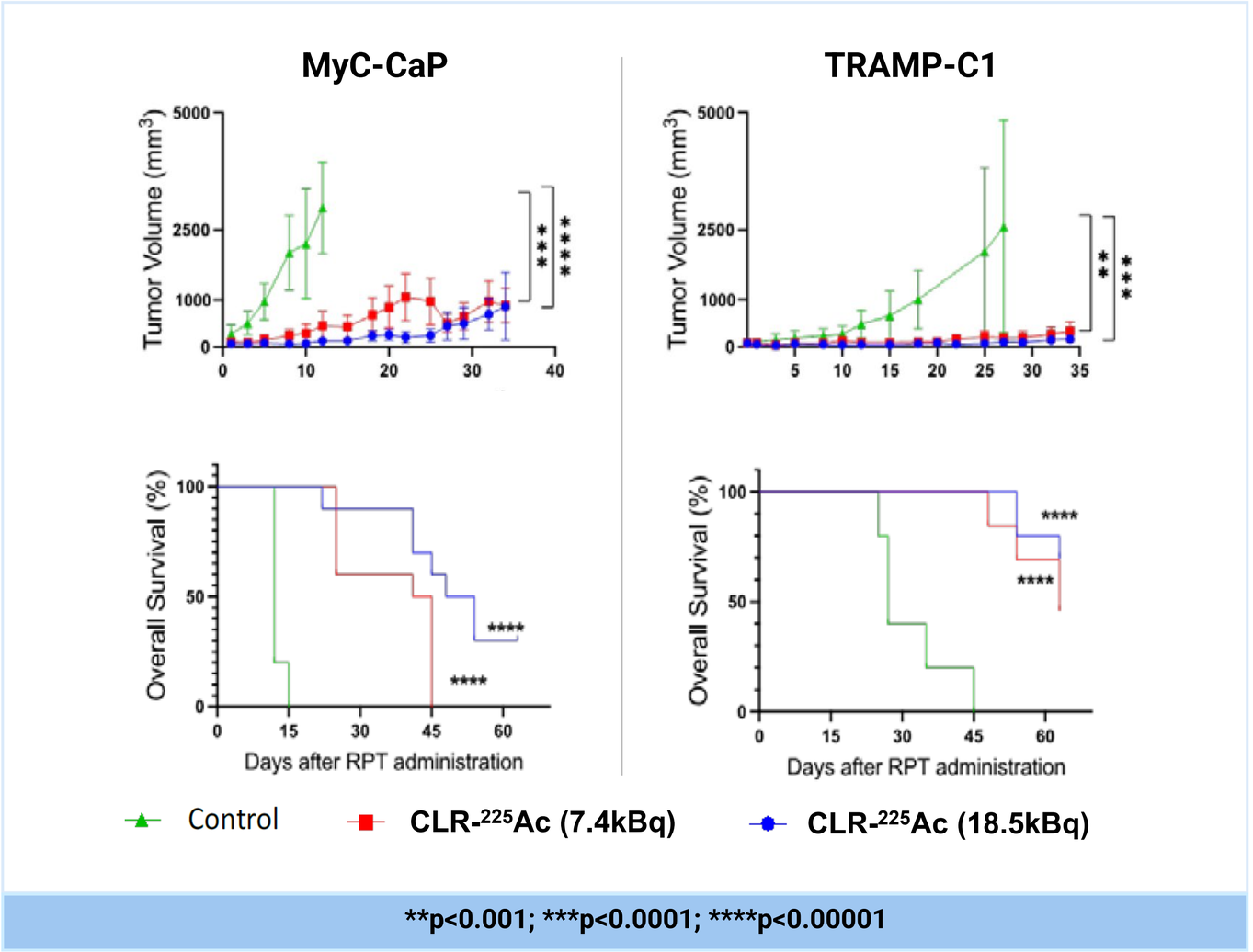
PRC CLR 121225 (CLR 225): Alpha Emitter (^{225}Ac)

Tumor Volume Reduction and Survival Benefit in Prostate Cancer

- MyC-CaP and TRAMP-C1 prostate cancer xenograph models dosed after tumors reached 200mm3
- Doses of 200nCi or 500nCi
- Dosimetry data showed increased uptake in TRAMP-C1 (0.58Gy/kBq) versus MyC-CaP (0.25Gy/kBq) model
- Distribution and percent uptake into the tumors was similar to that observed in other models with other isotopes
- Observed statistically significant difference on tumor volume reduction and survival benefit in both models at both doses



**p<0.001; ***p<0.0001; ****p<0.00001

PRC CLR 121225 (CLR 225): Alpha Emitter (^{225}Ac)

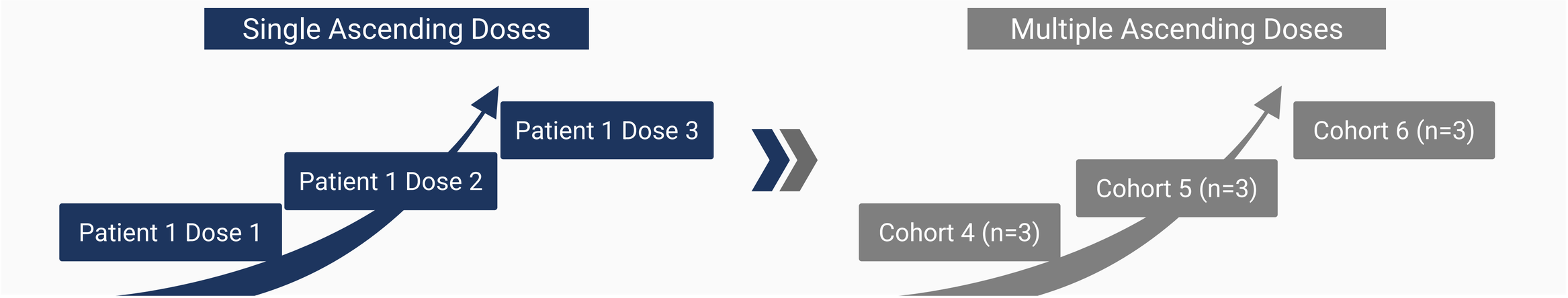
Phase 1 Clinical Study

Excellent labeling efficiency with ^{225}Ac

- Simplified reaction process
- Preferred formulation for toxicity studies (no polysorbate needed)

Phase 1 study design

- Imaging and therapy study
- Dose escalation utilizing an accelerated titration design (allows intrapatient dose escalation for more rapid dose escalation); dose limiting toxicities to be assessed post-cycle 1 day 57
- Dose escalations = 40% increases until first moderate toxicity; then standard 3+3 escalation



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Phospholipid Radioconjugate (PRC) Program

Other Emitters:

Astatine (^{211}At)

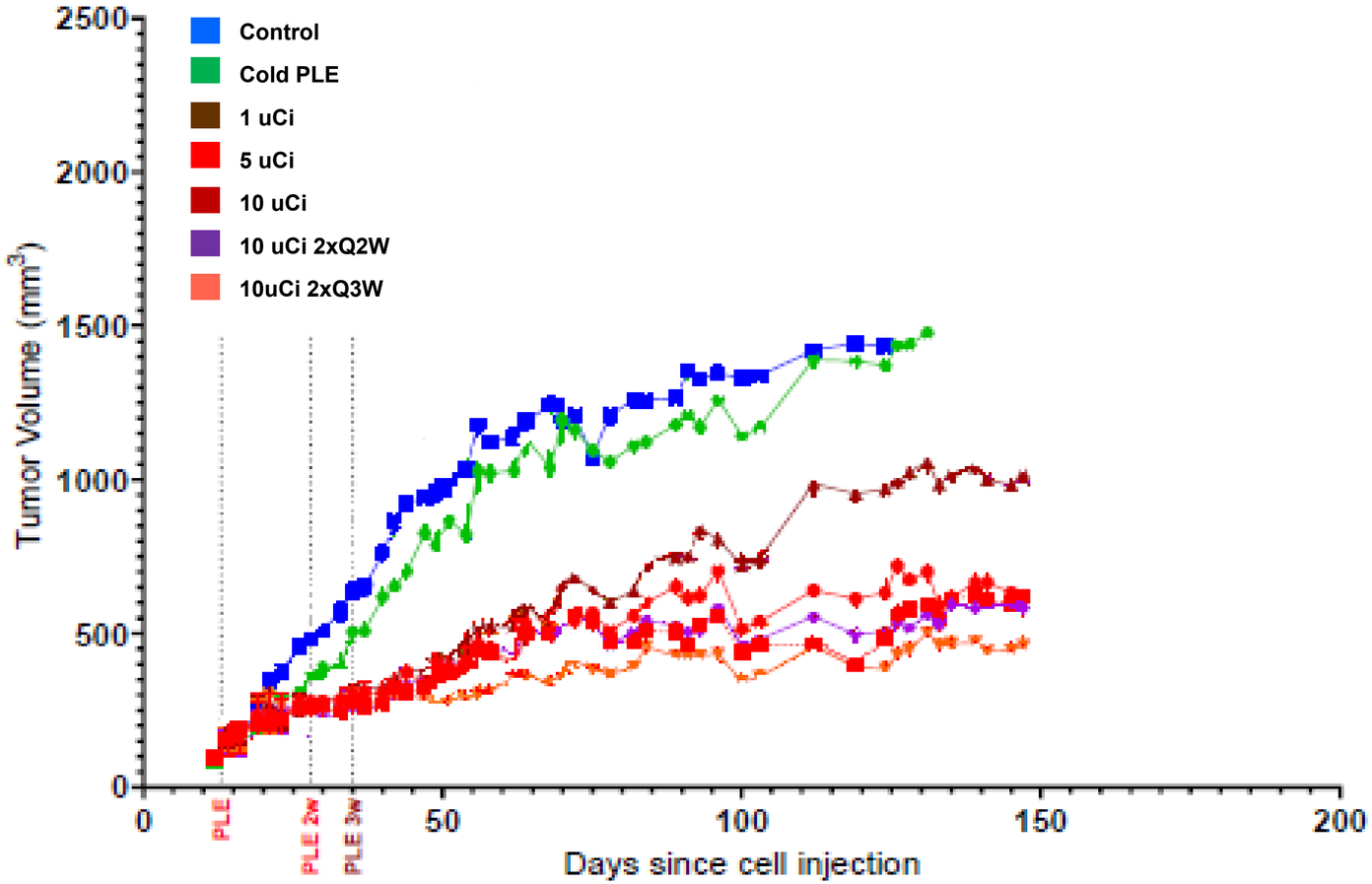
Lead (^{212}Pb)

Lutetium (^{177}Lu)

CELLECTAR BIOSCIENCES

PRC CLR 121211: Astatine (^{211}At)

Efficacious and Well Tolerated in Triple Negative Breast Cancer Model (HCC70)



- A variety of doses and dosing regimens tested
- Tumor volume at dosing ~150mm3
- All treatment doses show some tumor volume reduction and growth delay
- Optimum response achieved with 2 doses given 3 weeks apart (20uCi total) or high specific activity at 10uCi given 2 weeks apart
- Dosing optimization continues

CLR 211 Expected to Provide Tumor Eradication at Doses of ~40 uCi

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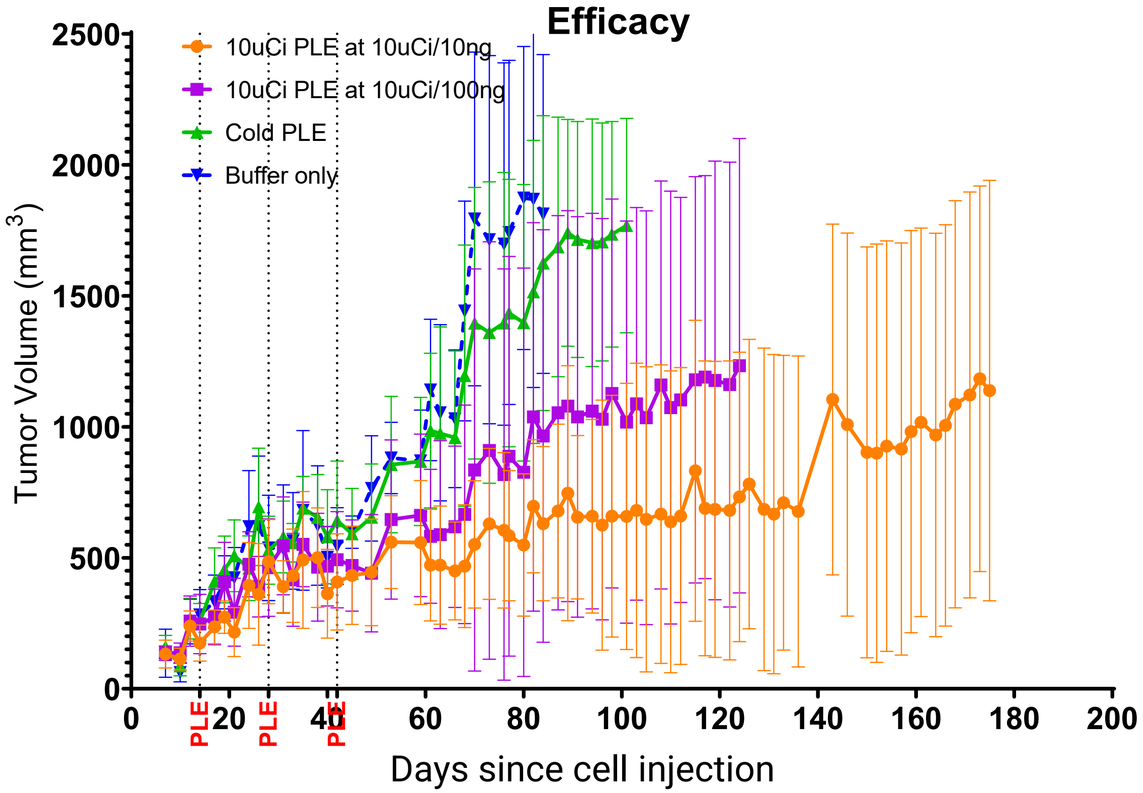
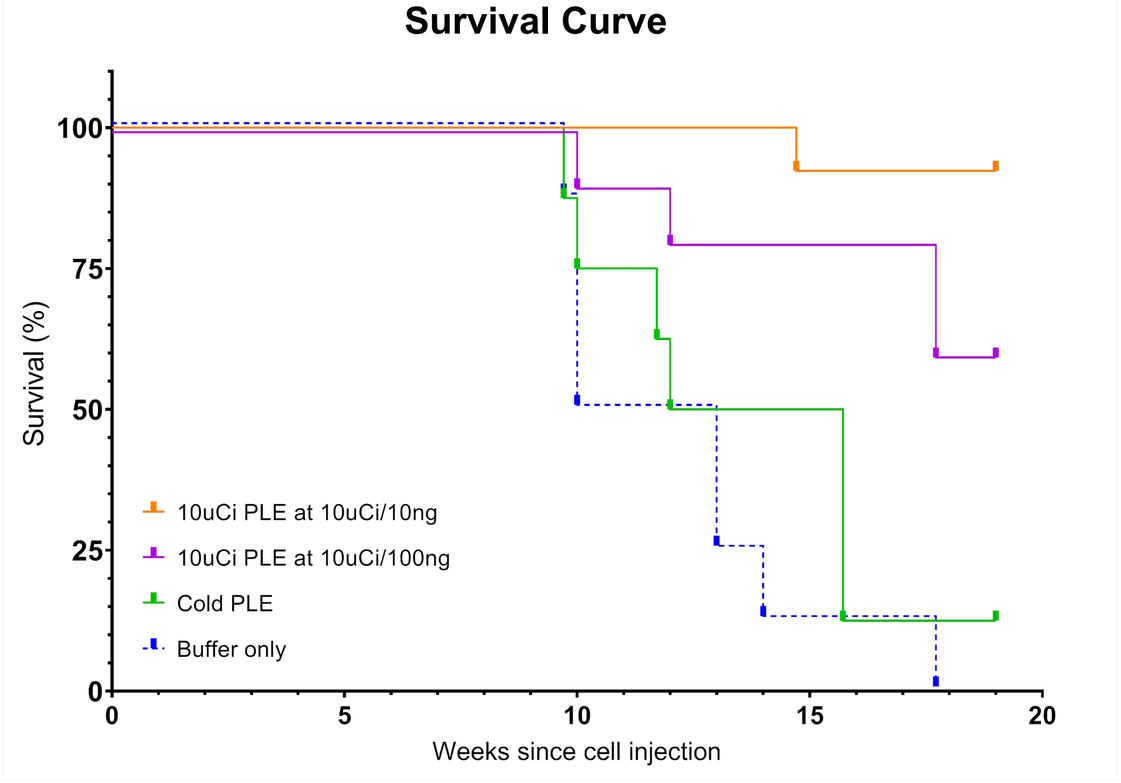
PRC CLR 121212 (CLR 212): Lead (^{212}Pb)

Efficacious and Well Tolerated





CLR 121212 tested in HCC70 triple negative breast cancer

- Growth inhibition with both doses tested
- Observed survival benefit with high specific activity dose
- All doses well tolerated

	10uCi PLE at 10uCi/10ng	10uCi PLE at 10uCi/100ng	Cold PLE	Buffer only
Median Survival (weeks)	Not reached	Not reached	13,8571	11,5

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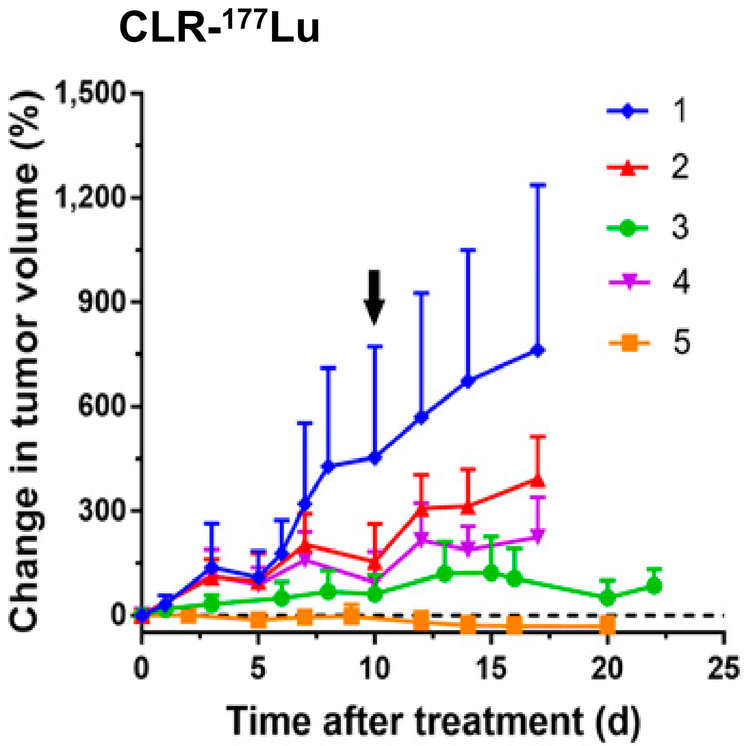
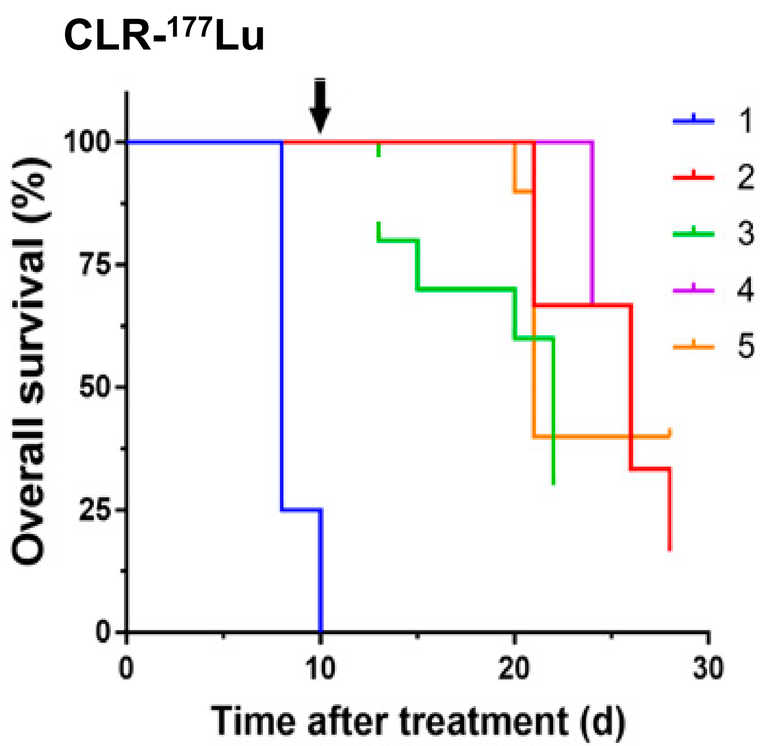
PRC CLR 121177 (CLR 177): Lutetium (^{177}Lu)

Activity in Breast Cancer





1. control: 2. 9.25MBq: 3. 18.5MBq: 4. fractionated 18.5MBq (2 x 9.25): 5. 3 x 9.25MBq

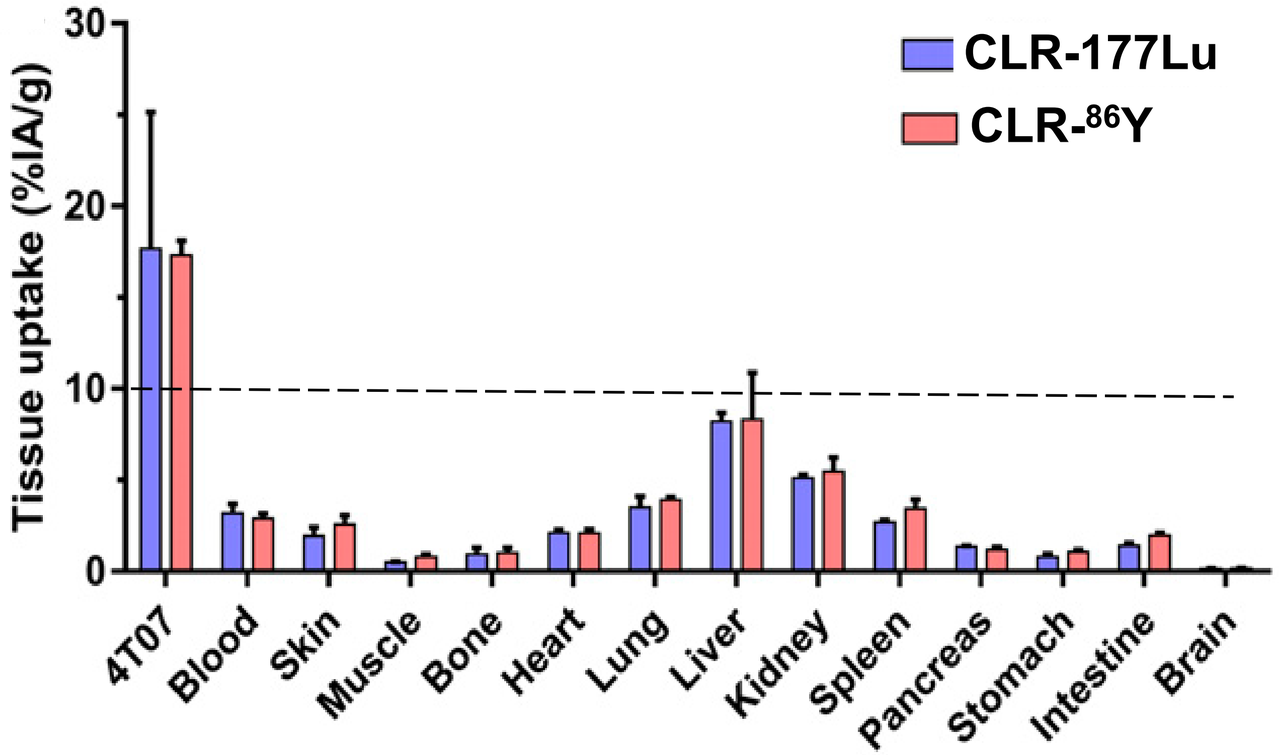
- Lutetium and Yttrium – PLEs tested in 4T07 (uptake) & 4T1 (efficacy) breast cancer xenograft model
- Tumors achieved 200 mm^3 prior to dosing

CELLECTAR BIOSCIENCES

PRC CLR 121177 (CLR 177): Lutetium (^{177}Lu)

Tissue Uptake and Distribution

- Uptake and distribution is similar for CLR-177Lu and CLR-86Y: tumor uptake ~18% infused activity/g tissue
- Approximately 2Gy/MBq delivered to the tumor with CLR-177Lu
- Tumor volume reduction observed in dose response with complete tumor regression achieved with high dose fractionated CLR-177Lu



1. control: 2. 9.25MBq: 3. 18.5MBq: 4. fractionated 18.5MBq (2 x 9.25): 5. 3 x 9.25MBq

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Phospholipid Radioconjugate (PRC) program

Beta Emitter
Iopofosine I 131
Waldenstrom Macroglobulinemia

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PRC Iopofosine I 131: CLOVER-WaM Demographics

Patient Characteristics Data Cut-off September 30, 2024

Patient Characteristics	
Safety population, n	65
Median age, years (range)	70 (50-88)
Sex, n (%)	
Male	48 (73.8)
Female	17 (26.2)
IPSSWM score n (%)	
Low	28 (43.1)
Medium	20 (30.8)
High	17 (26.2)
Median IgM, mdl (range)	2115 (252 – 7400)
Extramedullary Volume, mm^3 (range)	2303 (210 – 17185)
Bone Marrow Burden at Baseline, n (%) 52	
< 20%	21 (40.4)
20 – 50%	17 (32.7)
> 50%	14 (26.9)

Patient Characteristics	
Median Prior Lines of Therapy, n (range)	4 (2-15)
Prior Treatment/Refractory n (%)	
BTKi	48 (73.8) / 37 (77.1)
Rituximab	60 (92.3) / 45 (75.0)
Chemotherapy	55 (84.6) / 33 (60.0)
BTKi & Rituximab (Dual Refractory)	43 (66.2) / 25 (58.1)
BTKi, Rituximab & Chemo (Triple Refractory)	37 (56.9) / 18 (46.4)
Genotype (%)	
MYD88 WT/Mut (n=65)	18 (27.7) / 47 (72.3)
CXCR4 WT/Mut (n=53)	45 (84.9) / 8 (15.1)
P53 WT/Mut (n=52)	42 (80.8) / 10 (19.2)

Most Refractory WM Patient Population Studied in Clinical Trials

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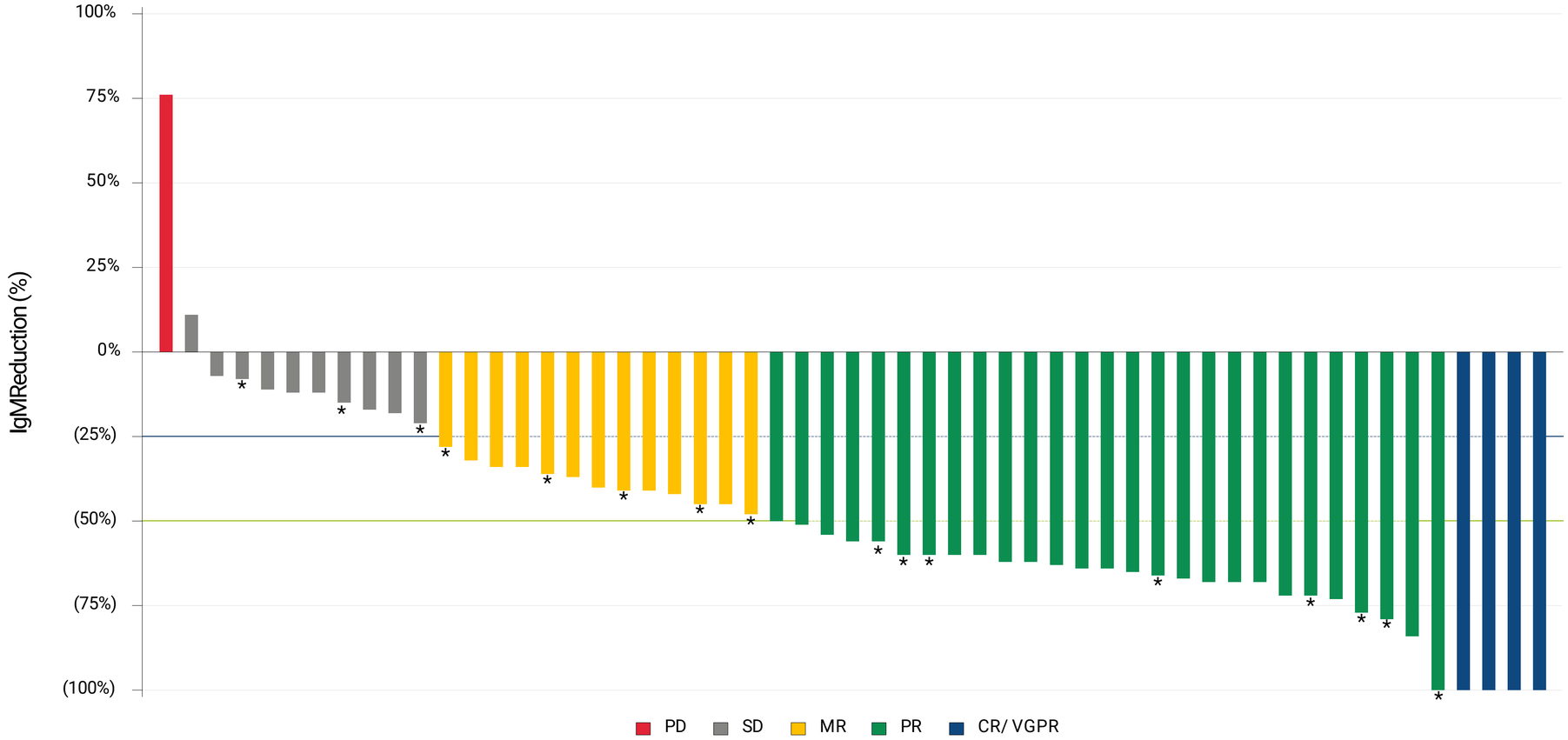
PRC Iopofosine I 131: CLOVER-WaM Efficacy Data

Best Serum IgM Response by Patient

Evaluable Efficacy Population (n=55)

ORR = 83.6% **MRR = 58.2%** **DCR = 98.2%**



DOR and PFS ongoing with median of 11.4 months of follow-up

PRC Iopofosine I 131: CLOVER-WaM Safety Data

Observed Cytopenias Consistent with Treatment of Hematologic Malignancies

Most common TEAE (>10% patients), n (%)*	Any grade n=65
Hematologic Toxicities	
Thrombocytopenia	56 (86.2)
Neutropenia	52 (80.0)
Anemia	42 (64.6)
White blood cell count decreased	21 (32.3)
Lymphocyte count decreased	9 (13.8)
Febrile neutropenia	7 (10.8)
Non-hematologic Toxicities	
Fatigue	22 (33.8)
Nausea	19 (29.2)
Diarrhea	13 (20.0)
Dyspnea	11 (16.9)
Headache	11 (16.9)
Dizziness	10 (15.4)
Epistaxis	9 (13.8)
Decreased appetite	9 (13.8)
Constipation	8 (12.3)

Most common TEAE (>10% patients), n (%)*	Grade ≥3 n=65
Thrombocytopenia	53 (81.5)
Neutropenia	43 (66.2)
Anemia	31 (47.7)
White blood cell count decreased	18 (27.7)
Lymphocyte count decreased	8 (12.3)
Febrile neutropenia	7 (10.8)

- No significant bleeding
- Limited rate of infection (<10%)
- All hematologic AEs were manageable
- All patients recovered from cytopenias
- All non-hematologic AEs < Grade 2

TEAE, treatment-emergent adverse event.

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PRC Iopofosine I 131: U.S. WM Market Opportunity

Addressable Patients in a Concentrated Market with High Unmet Need

Prevalent Patient Population = 26,000 [2,3]

~11,500
Relapsed Refractory patients

~4,700
3rd line or greater patients

~1,000
Patients exhausting treatment options by 3rd line

Patients are concentrated geographically in large community and academic accounts[3]

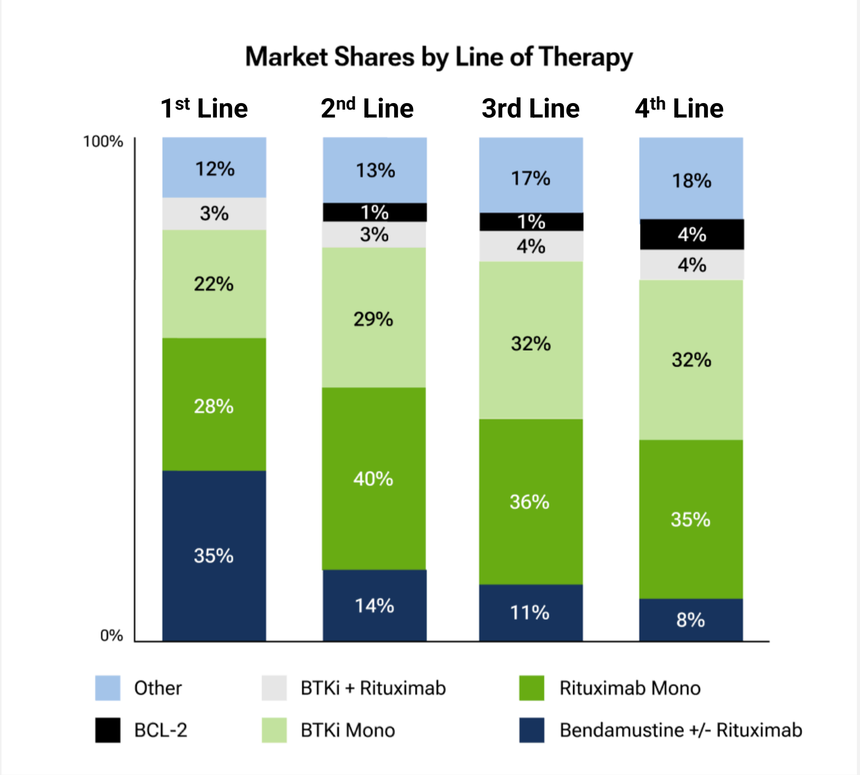
~80% of patients will receive 3rd line treatment

~50% of patients are retreated with the same or similar treatment from prior lines of therapy

>60% of therapies utilized are not FDA-approved and cannot be promoted

~80% of WM patients located in 15 states[4]

No Established Standard of Care Across All Lines of Therapy [5]

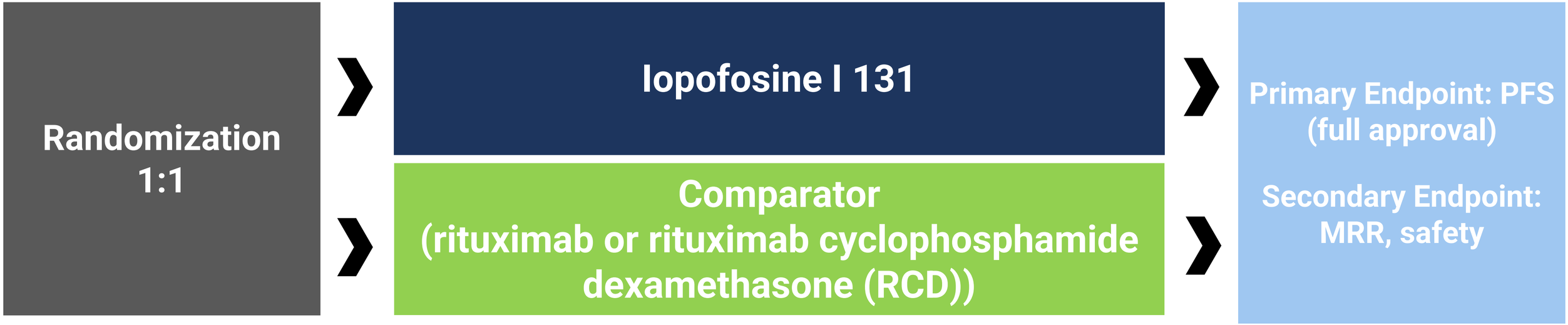


4-12% Major Response Rates RWD beyond 2nd line [6]

European WM Prevalence Population Similar to the United States

PRC Iopofosine I 131: Confirmatory Study Design

One Study for Full Approval in Waldenstrom's macroglobulinemia



- **Enrollment:** 200 patients (100/arm)
- **Dosing:** Iopofosine I 131 (4 doses of 15 mCi/m2); package insert for RCD
- **Primary Endpoints:** Superiority for PFS
- **Secondary Endpoint:** MRR & Safety; Overall survival assessed for harm and futility
- **Phase 3 Top line data:** MRR Expected 18 – 24 months post first patient enrolled; PFS expected 24 – 30 months
- **Estimated Total Study Cost $42M:** $30M to full approval (PFS data)

Currently Seeking Partnership to Initiate Phase 3 Study;
Increased Patient Recruitment Resources May Reduce Enrollment Timeline

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PRC Iopofosine I 131: European Medicine Agency

Regulatory - Conditional Approval Pathway Guidance

Criteria	Requirement	Iopofosine Data
Benefit/Risk Assessment	Survival Data	CLOVER-WaM Survival data ongoing, PFS median 11.4 months and ongoing
Medical Need	Lack of current treatment options or significant improvement	Post BTKi WM patients meet definition
Benefit Outweighs Risk	Demonstration of significant benefit	MRR = 58.3%; DoR > 11 months & ongoing
Comparator Selection for confirmatory study	Comparator justification	Rituximab and RCD are used extensively in EU (Both pre- and post-BTKi)

July 2025

- EMA responded to submission package which included. clinical data & confirmatory study protocol
- Advanced to scientific advice meeting & requested information prior to recommendation

September 2025

- Scientific advice meeting scheduled
- EMA recommendation expected late 3Q early 4Q

Value

- Potential accelerated EU approval, launch 4Q'26/1Q'27
- Supports partnership, licensing, or other non-dilutive monetization opportunities

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Final Decision to Proceed to CMA Late 3Q / Early 4Q

Phospholipid Radioconjugate (PRC) program

Beta Emitter
Iopofosine I 131
Additional Indications

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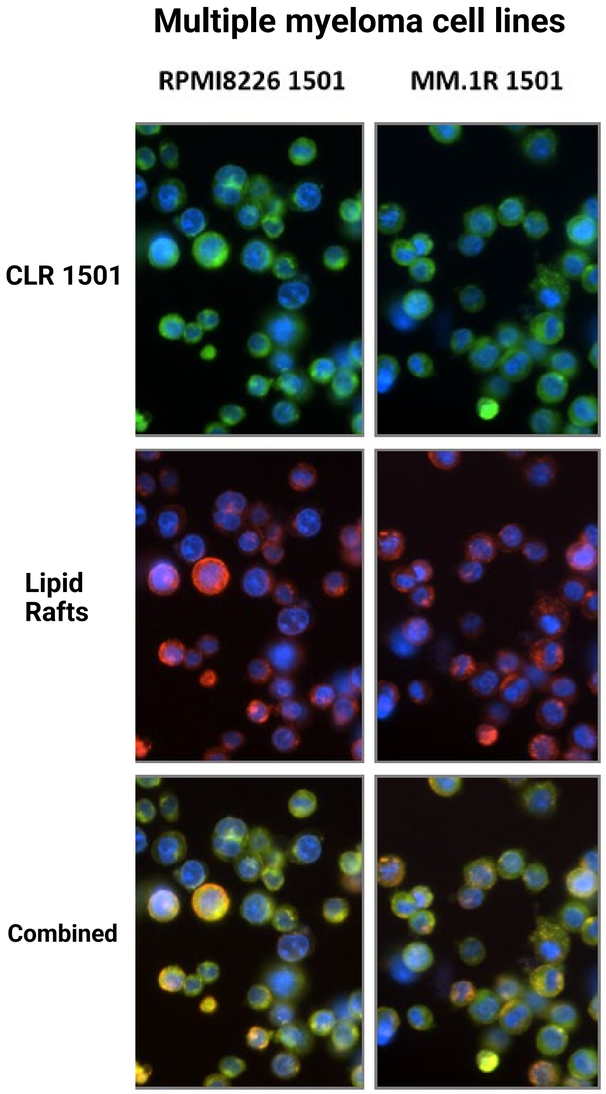
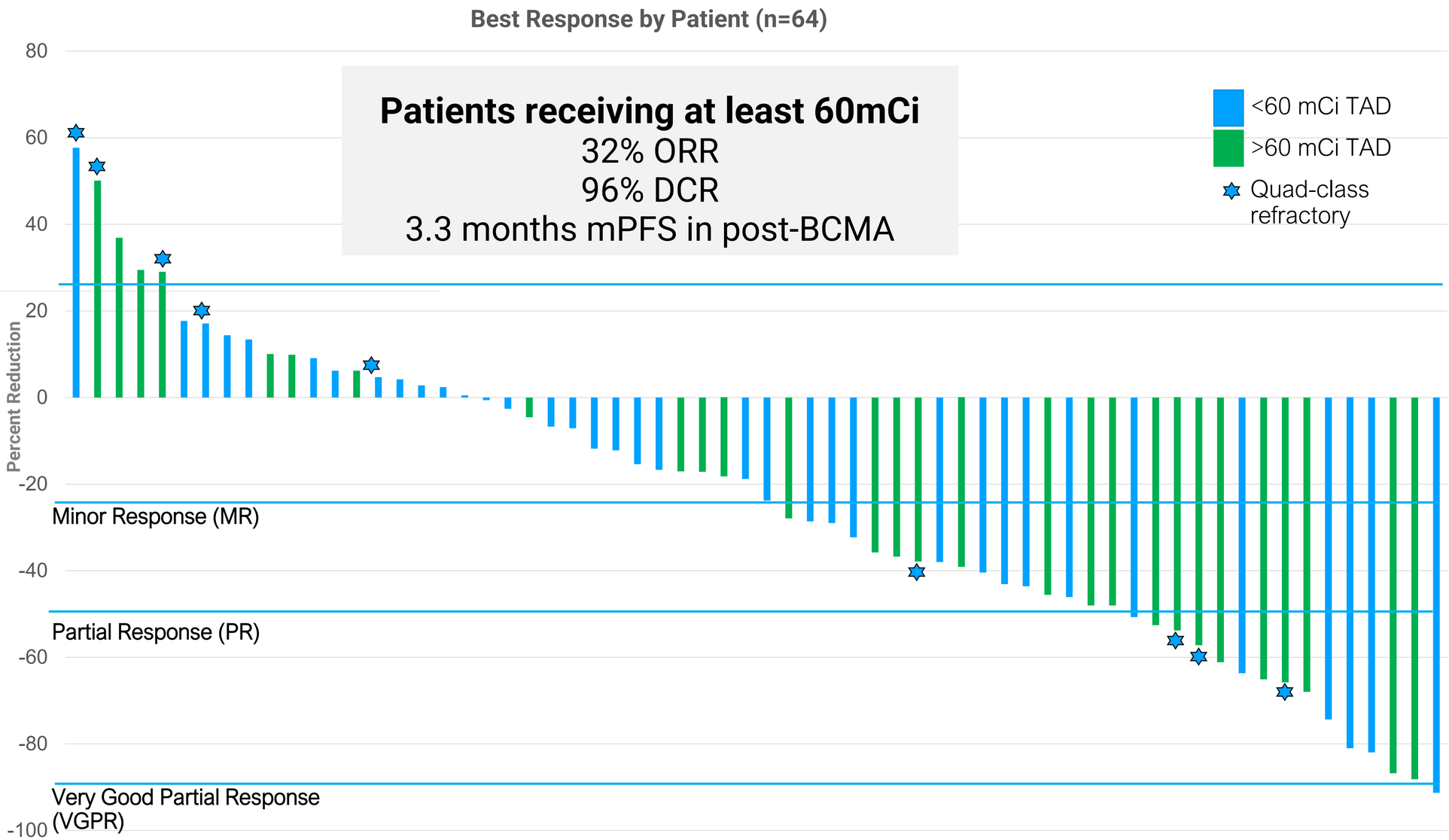
PRC Iopofosine I 131: r/r Multiple Myeloma Best Response

Waterfall Plot of All Multiple Myeloma Patients





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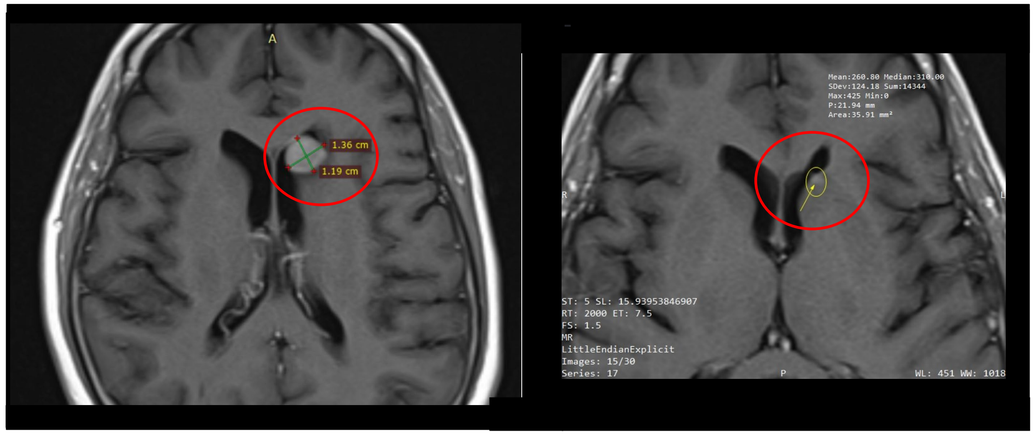
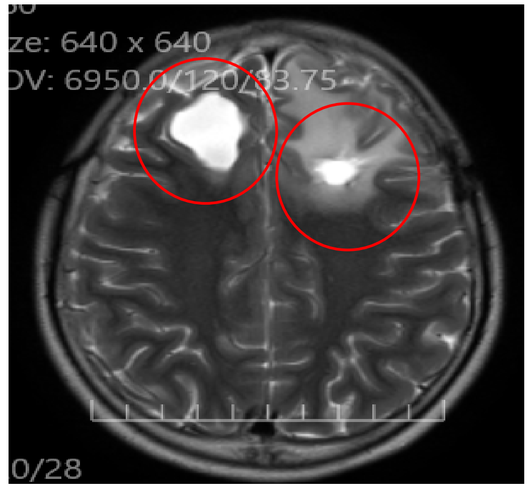
PRC Iopofosine I 131: Broad Clinical Activity Beyond WM

Refractory Primary CNS Lymphoma



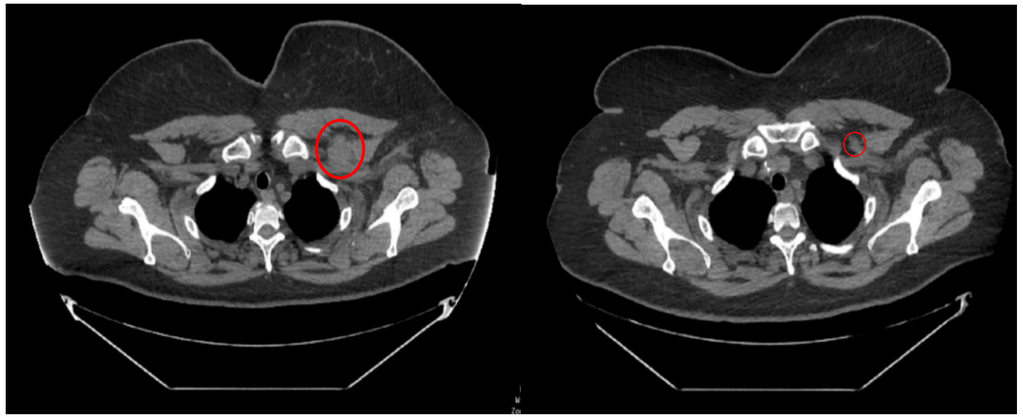
Complete Response

Relapsed Pediatric High-Grade Glioma



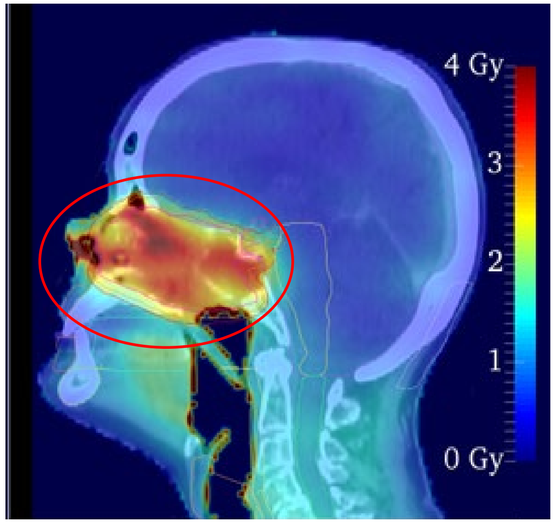
Extended PFS (~12 months)

Refractory Diffuse Large B-cell Lymphoma



30% ORR with 10% CRR – CR PFS 6.8 years

Recurrent Head & Neck Cancer



73% ORR with 64% CRR

Financials

Capitalization

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Cellectar Biosciences: Financial Summary

Cash Position as of June 30, 2025 (millions)	$11.0M[1]
Capitalization as of July 2, 2025	
Common Stock Outstanding	**2,857,039**
July 2025 Pre-Funded Warrants (Exercise Price $0.00001)	**335,000**
Convertible Series D Preferred Stock (111.11 shares)	**3,703**
Convertible Series E-2 Preferred Stock (35.60 shares)	**13,040**
July 2025 Warrants (Exercise Price $5.25)	**1,380,000**
July 2025 Representative Warrants (Exercise Price $7.75)	**82,800**
Warrants (Weighted Avg Exercise Price $99.00)	**522,011**
Options	**212,213**
Fully Diluted	**5,405,806**

Cash Position Does Not Include ~$6.9 Million Raised in July

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Cellectar's Formula for Value Creation

Strategic Growth and Expansion

- **Advance into Phase 1 solid tumor studies**
  - CLR 125 pursuing triple negative breast cancer ~ r/r global market potential ~$11B
  - CLR 225 initially pursuing pancreatic cancer, ~ r/r global market potential ~$10B
- **Optimize iopofosine I 131**
  - Received FDA Breakthrough Designation – June 2025
  - Initiate confirmatory study and submit for accelerated approval in US for WM
  - Receive agreement to proceed with Conditional Approval in Europe; response expected 3Q/4Q2025: supports potential EU commercialization 4Q26/1Q27
  - US and EU development and/or commercialization partnerships
- **Secure additional collaborations and associated non-dilutive funding**
- **Leverage novel PDC platform**
  - Expand development of preclinical programs
- **Extensive IP portfolio; radio-conjugates, small molecules, oligonucleotide payloads and linker technology**

Thank You

CELLECTAR BIOSCIENCES

Executive Management Team

Greater than 95 years combined leadership experience

James Caruso
President, CEO and Director

ALLOS™ THERAPEUTICS

NOVARTIS

Bristol Myers Squibb™

BASF

Jarrod Longcor
Chief Operating Officer

AVILLION

Melinta THERAPEUTICS

ADVANCIS PHARMACEUTICAL CORP™

Chad Kolean
Chief Financial Officer

VIVEX BIOLOGICS

PIONEER® SURGICAL

TITAN SPINE

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Footnotes

1. Data on file
2. Internal claims analysis for Waldenstrom’s macroglobulinemia (January 2019-October 2023)
3. Putnam Market Sizing 2023
4. Putnam Quantitative Research 1Q 2023 (n=102 MDs); Putnam Analysis and WM Advisory Boards
5. Komodo Claims Data
6. Real-world data - large community oncology network
7. Puregmaa Khongorzul, Cai Jia Ling, Farhan Ullah Khan, Awais Ullah Ihsan, Juan Zhang; Antibody–Drug Conjugates: A Comprehensive Review. Mol Cancer Res 1 January 2020; 18 (1): 3-19. https://doi.org/10.1158/1541-7786.MCR-19-0582