



RADIOPHARM THERANOSTICS COMPANY PRESENTATION

NOVEMBER 2022



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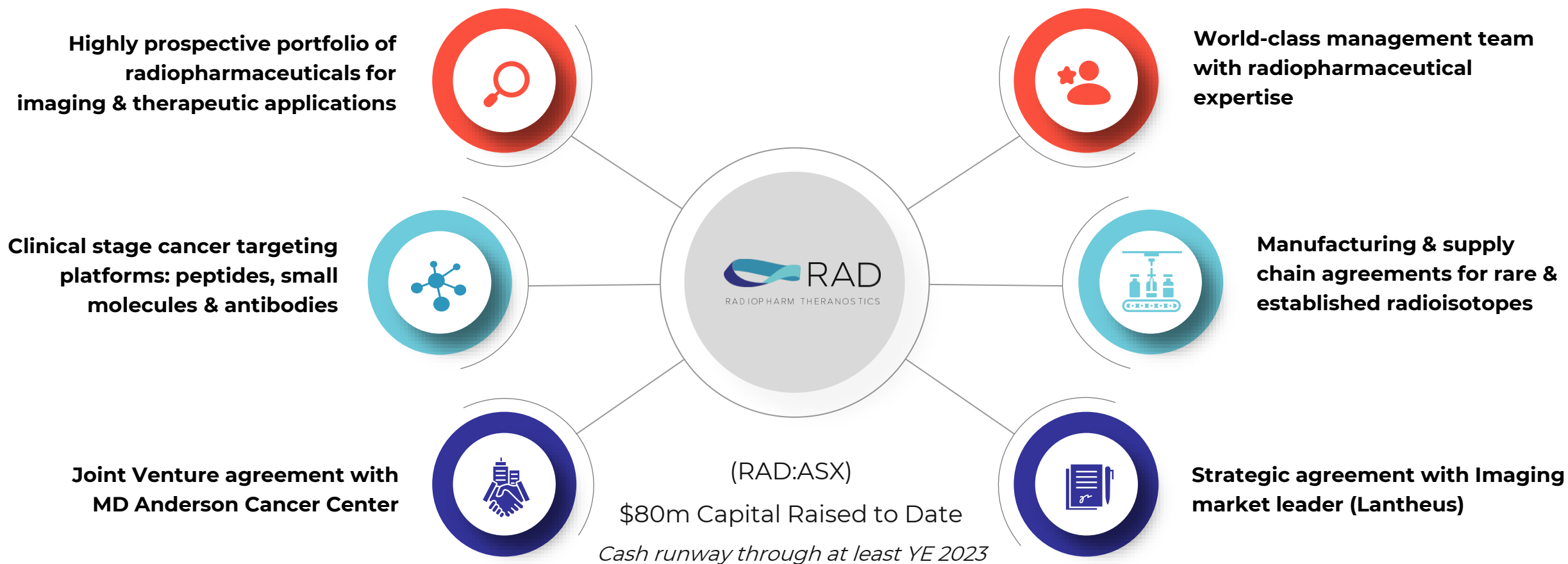
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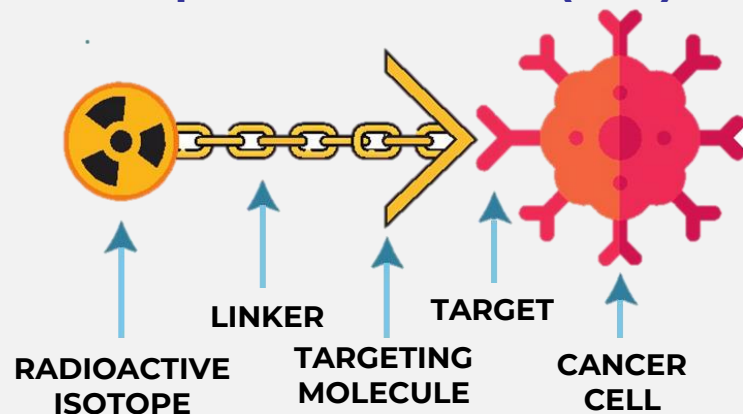
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BECOMING THE RECOGNIZED LEADER IN FIGHTING CANCER THROUGH INNOVATIVE RADIOPHARMACEUTICAL THERAPIES



RADIOPHARMACEUTICALS DELIVER RADIATION THERAPY DIRECTLY TO CANCER CELLS

Radiopharmaceuticals (RPS)



Building Blocks of Radiopharmaceuticals

01

TARGETING MOLECULE

High affinity, specific to cancer cells
small molecule, peptide or antibody

02

RADIOACTIVE ISOTOPE

Imaging Isotope to **SEE** the cancer cells, Therapeutic Isotope to **TREAT** cancer cells

03

LINKER

Joins Targeting Molecule and Radioactive isotope

Imaging

SEE and measure disease
with radioactive isotopes



Imaging compounds specifically deliver radioactive isotopes to detect and image cancer cells

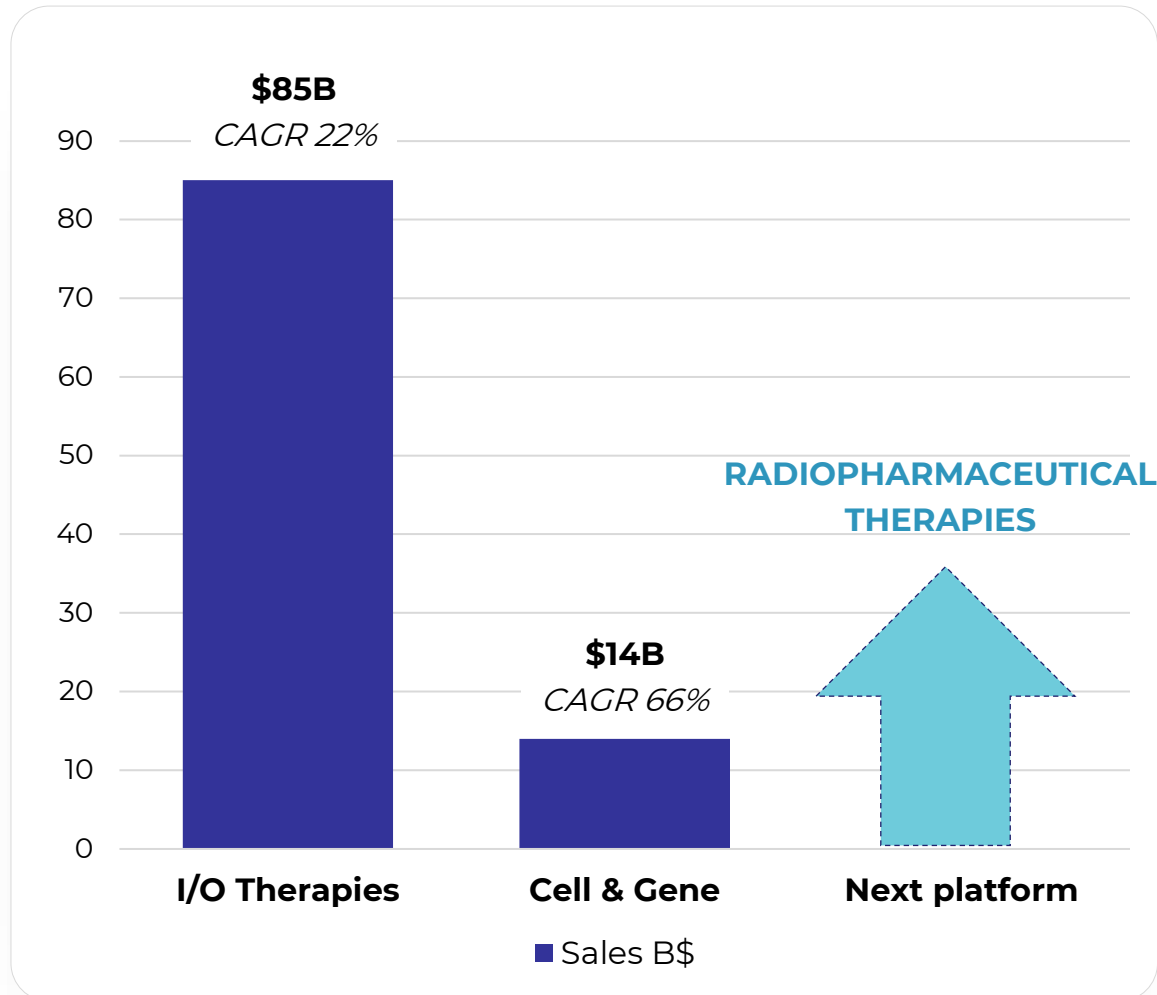
Therapeutics

TREAT cancer with high
energy particle emitters



Extreme selectivity to cancer cells while
limiting damage to healthy tissues

RADIOPHARMACEUTICAL THERAPY HAS THE POTENTIAL TO TRANSFORM THE CANCER TREATMENT PARADIGM



Worldwide Oncology Market in 2025

~\$290B; CAGR 5y (2020-2025) = 13%

Chemo and Targeted Therapies

~\$190B; CAGR 5y (2020-2025) = 9%

Radiopharmaceuticals Designed to Enrich Current Pillars of Cancer Treatment

- Complement Surgery
- Postpone Need for Chemotherapy
- Enhance Targeted & Immuno-Therapies

RADIOPHARM THERANOSTICS DEVELOPS INNOVATIVE TARGETED RADIATION TREATMENTS

Radiation Treatment

standard of care for over 100 years

Cancer cells are sensitive to radiation induced DNA damage

External Beam Radiation – effective but **collateral damage** as beam passes through healthy tissue

Passive accumulation of radioisotopes into tissue

- radioactive iodine naturally accumulates in thyroid
- radium 223 dichloride (Xofigo) accumulates in bone

Targeted Antibody Drug Conjugates

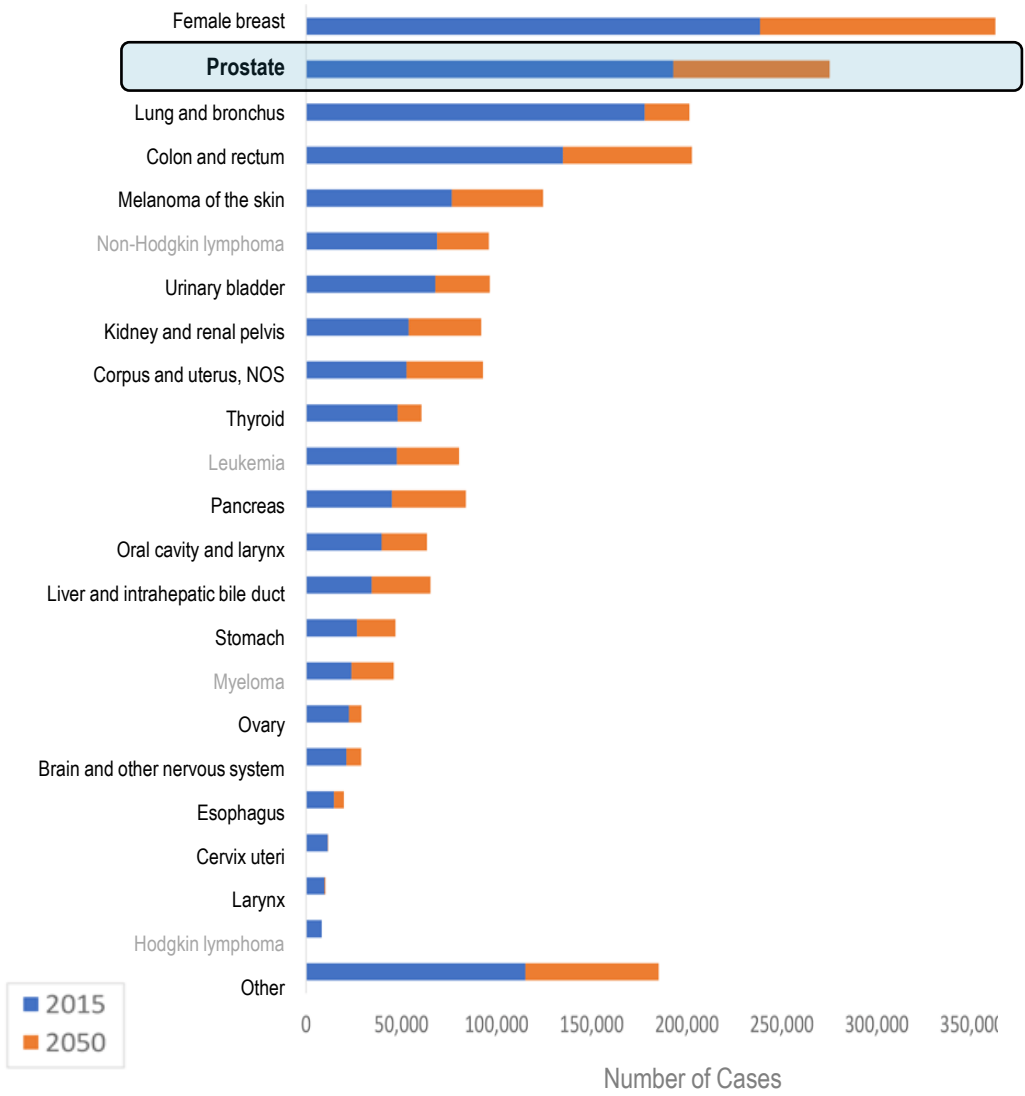
Cancer targeting molecules deliver cytotoxic molecules to cells

- 12 antibody drug conjugates have been approved by FDA (up to Sept 2022)
- **Limited success since drug must get inside cancer cells**

**Targeted
Radiopharmaceuticals**

Engineered to selectively deliver radiation to cancer cells
Proximity to cancer cells delivers lethal dose, even if not internalized by cells

PROSTATE THERANOSTICS: MOST RECENT SUCCESSFUL TARGETED RADIOPHARMACEUTICALS



Imaging

Combined analysts' peak sales consensus for:

Pylarify, Locametz, Illucix

~\$1B

FDA approved in 2021

Therapeutic

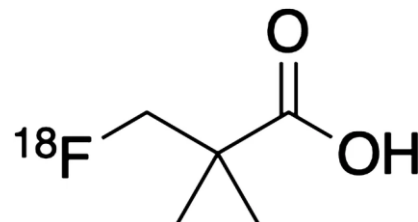
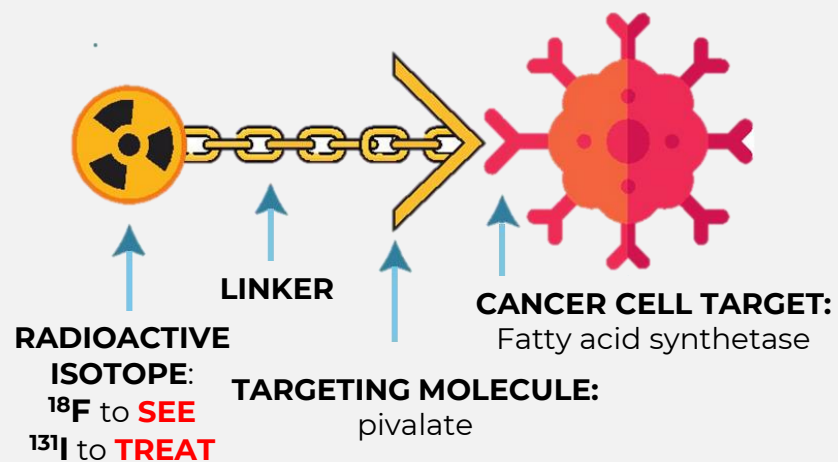
Analysts' peak sales consensus for:

Pluvicto

~\$2.5B

FDA approved in 2022

F18-PIVALATE FOR IMAGING AND TREATMENT OF BRAIN METASTASIS



F18-PIVALATE

Selectively targets fatty acid synthetase which is overexpressed in tumors but not normal brain cells

F18-PIVALATE: LEAD PRODUCT CANDIDATE

Novel radiopharmaceutical for detection, characterization & progression monitoring of glioblastoma & brain metastases

~20-40% of cancer patients develop metastatic brain cancer during course of illness

Current imaging technologies (such as PET FDG & MRI) have limitations, due to necrotic, inflammatory & high sugar uptake confounding factors

F18-pivalate unique Mechanism of Action & transformational approach designed to overcome limits

Pivalate Delivers Positive Phase II Data In Brain Metastasis Trial

RAD 101 Phase IIa Clinical Trial: F18-pivalate PET/MRI Imaging

Patients with one or more cerebral metastases from different primary tumors of origin; breast, lung, melanoma & colorectal cancer

TRIAL ANALYSED:

- Selective F18-pivalate uptake in cerebral metastases
- Impact of Stereotactic Radiosurgery (SRS) on F18-pivalate uptake at early time points (4-8 weeks)
- 2 cohorts of patients: 11 treatment naïve & 6 SRS treated (4-8 weeks post treatment)

RESULTS

F18-pivalate PET showed high uptake regardless of origin of primary tumor

Indicates that pivalate can be used to detect & monitor cerebral metastases

- Patients without previous external beam radiation showed higher tumor uptake of radiopharmaceutical
- Previously treated patients show trend towards lower radiopharmaceutical uptake

The RAD 101 Phase II results were presented at a Joint Meeting of the European Organisation for Research and Treatment of Cancer (EORTC), the (USA) National Cancer Institute (NCI), and the America Association for Cancer Research (AACR) in Barcelona, Spain, 26-28 Oct 2022

POSITIVE PIVALATE TRIAL DATA IN BRAIN METASTASIS

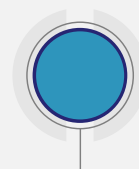
Pivalate Platform Next Steps:



RAD 101 (Imaging)

Scientific Advisory Board analysis of Phase IIa data to determine most appropriate clinical use *(YE 2022)*

Meet with FDA to determine regulatory pathway to accelerate development of pivalate for imaging *(Q1 2023)*



RAD 102 (Therapeutic)

Imaging Proof of Concept supports therapeutic development

Finalize therapeutic molecule radiochemistry

Leverage Phase IIa imaging data for Therapeutic Phase I protocol

RAD CODE	MOLECULE	INDICATION	DX / TX	ISOTOPE	COUNTRY	PRECLINICAL	PHASE I	PHASE II	PHASE III	NOTES
RAD 101	PIVALATE	BRAIN METS	Dx	F18	UK					POSITIVE PHASE II ACHIEVED

The RAD 101 Phase II results are being presented at a Joint Meeting of the European Organisation for Research and Treatment of Cancer (EORTC), the (USA) National Cancer Institute (NCI), and the America Association for Cancer Research (AACR) in Barcelona, Spain, 26-28 Oct 2022

BRAIN METASTASIS MARKET OPPORTUNITY

Prostate cancer is the largest radiopharmaceutical imaging indication that received FDA approval
Best proxy for assessing Radiopharm's potential market opportunity for its brain metastasis indication

Cancer Type	New US Cases Per Annum	Eligible New Patients Per Annum	Price Per Dose	Revenue Opportunity Per Annum	Companies with Lead Products in Indication
Prostate	248,000 <small>Source: SEER database US incidence</small>	170,000 <small>Source: IR LANTHEUS HOLDING 2021</small>	USD\$4,730 <small>Source: Taylor Collison</small>	USD\$804.1M	 LANTHEUS USD\$4.7B market cap ³  TELIX A\$1.7B market cap ³
Brain Metastasis ¹	390,000 <small>Source: SEER database - US incidence</small>	265,000 <small>Management estimate: Assumed same proportion of eligible patients as prostate</small>	USD\$4,730 ² <small>Management estimate: Assumed same pricing as prostate</small>	USD\$1,253.5M	 RAD RADIOPHARM THERANOSTICS A\$42.1M market cap ³

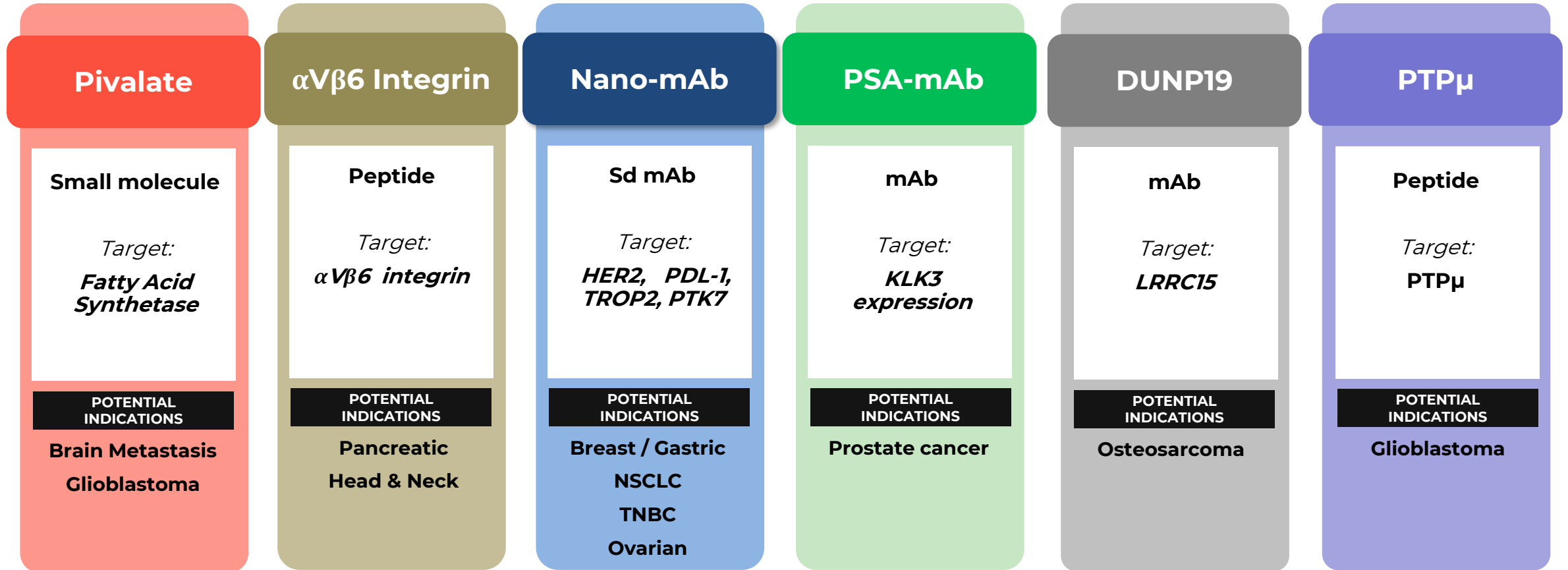
¹ Assumes RAD obtains FDA approval for F18-pivalate and that price per dose is equivalent to Prostate Cancer Diagnostic Imaging Agent, Pylarify

² Based on single dose per patient. (Potential for multiple doses per patient.)

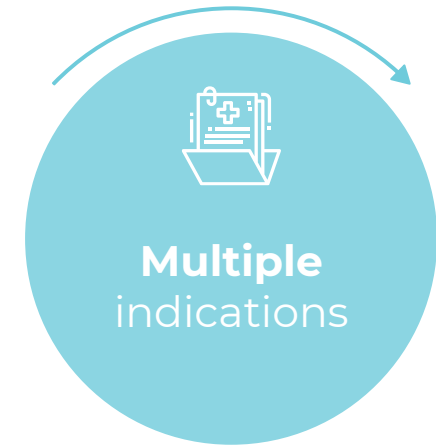
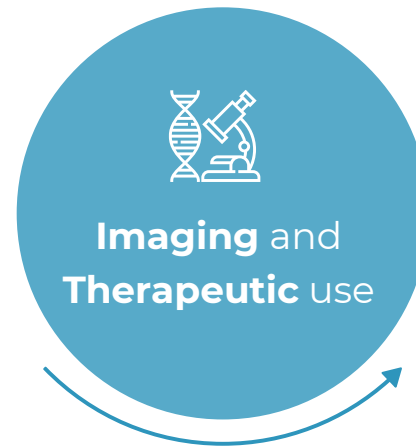
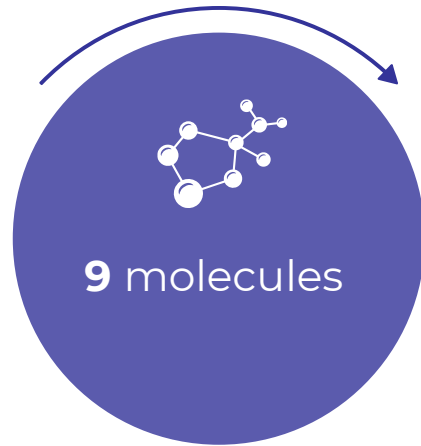
³ Market capitalisation as at 13 October 2022

SIX PLATFORMS, WELL DIFFERENTIATED MOLECULES

One Of The Deepest Pipelines In Radiopharmaceutical Therapies



PORTFOLIO PRIORITIZATION



20+ clinical development trials

PRIORITIZATION FILTERS

Disease Area Size & Unmet Need

Market potential as Imaging or Therapeutic
(First to market or Best in class)







Clinical Trial Probability of Success
(based on preclinical & clinical scientific evidence)

Entry Barriers vs Standard Of Care
(scientific, economic, infrastructure)

Differentiation vs Other Radiopharmaceuticals
(approved or in advanced development)

SIX PRIORITIES:
2 Imaging, 4 Therapeutic

CURRENT PORTFOLIO PRIORITIES

RAD CODE	MOLECULE	INDICATION	DX / TX	ISOTOPE	PRECLINICAL	PHASE I	PHASE II	PHASE III	NOTES
					IMAGING				
RAD 101	pivalate	Brain Mets	Dx	F18					Positive Phase II readout Oct 2022
RAD 301	Integrin $\alpha V\beta 6$	Pancreatic	Dx	Ga68					Phase I planned Q4 2022. Clinical data already available in 88 pts
					THERAPEUTIC				
RAD204	Sd mAb PDL1	NSCLC	Tx	Lu177					Phase I planned Q1 2023 Successful phase I imaging trial completed
RAD 402	PSA-mAb	Prostate	Tx	Ac225					Phase I planned Q1 2023 extensive pre-clinical data
RAD 202	Sd mAb HER2	Breast/Gastric	Tx	Lu177					Phase I planned Q2 2023 Successful phase I imaging trial completed
RAD 502	Dunp19	Osteosarcoma	Tx	Lu177					Phase I planned Q3 2023 Orphan Drug Designation & RPDD granted by FDA

MD ANDERSON & RAD JOINT VENTURE FUNDED IN SEPT 2022



49%

RADIOPHARM
VENTURES LLC

51%



Mandate: Develop novel radiopharmaceutical therapies Preclinical and Phase I



Management Team, Regulatory Strategy, Clinical Development



Intellectual Property 4 Molecules, R&D, Preclinical, Manufacturing

Radiopharm Ventures Pipeline

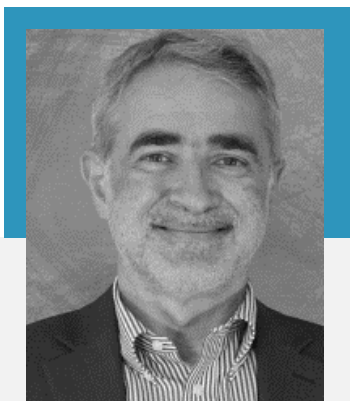
4 Preclinical Radiopharmaceutical Product Candidates

Lead Program RV01: Mill33B with ^{177}Lu , targeting B7H3 in colorectal cancer

EXECUTIVE LEADERSHIP TEAM



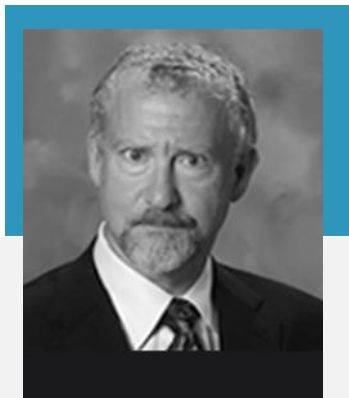
RICCARDO CANEVARI
MANAGING DIRECTOR / CEO



VITTORIO PUPPO
CHIEF OPERATING OFFICER



P. DAVID MOZLEY
CHIEF MEDICAL OFFICER



THOM TULIP
CHIEF TECHNICAL OFFICER



PAUL HOPPER
EXECUTIVE CHAIRMAN

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PTPμ



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αVβ6 Integrin



DR DAVID ULMERT

DUNP 19

PSA-mAb



DR HONG HOI TING

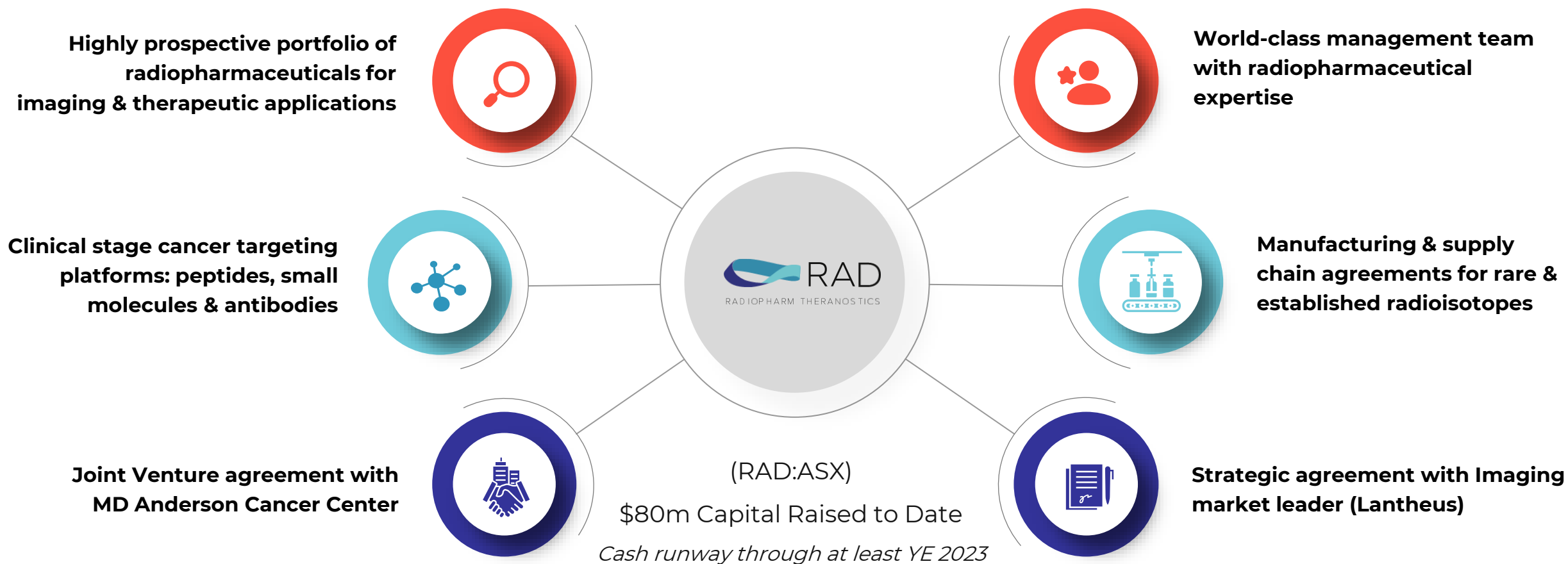
Nano-mAb



PROF SARA HURVITZ



BECOMING A RECOGNIZED LEADER IN FIGHTING CANCER THROUGH INNOVATIVE RADIOPHARMACEUTICAL THERAPIES



RAD CLINICAL DEVELOPMENT PIPELINE

9 unique and highly differentiated molecules

RAD CODE	MOLECULE	INDICATION	DX / TX	ISOTOPE	COUNTRY	PRECLINICAL	PHASE I	PHASE II	PHASE III	NOTES
RAD 101	pivalate	Brain Mets	Dx	F18	UK					Positive Phase II read out 10/2022
RAD 102	pivalate	Glioblastoma	Tx	I131	UK					
RAD 201	Sd mAb HER2	Breast	Dx	Tc99	USA					
RAD 202	Sd mAb HER2	Breast	Tx	Lu177	USA					
RAD 203	Sd mAb PDL1	NSCLC	Dx	Tc99	UK					Licensed to Lantheus WW; excl. China
RAD204	Sd mAb PDL1	NSCLC	Tx	Lu177	AUS					
RAD 205	Sd mAb TROP2	TNBC	Dx	Ga68						
RAD 206	Sd mAb TROP2	TNBC	Tx	Lu177						
RAD 207	Sd mAb PTK7	Ovarian	Dx	Ga68						
RAD 208	Sd mAb PTK7	Ovarian	Tx	Lu177						
RAD 301	Integrin $\alpha V\beta 6$	Pancreatic	Dx	Ga68	USA					
RAD 302	Integrin $\alpha V\beta 6$	Pancreatic	Tx	Lu177	USA					
RAD 401	PSA-mAb	Prostate	Dx	Zr89	AUS					
RAD 402	PSA-mAb	Prostate	Tx	Ac225	AUS					
RAD 501	Dunp19	Osteosarcoma	Dx	Cu64	USA					
RAD 502	Dunp19	Osteosarcoma	Tx	Lu177	USA					FDA ODD & RPDD granted 9/2022
RAD 601	PTP μ	Glioblastoma	Dx	Cu64						
RAD 602	PTP μ	Glioblastoma	Tx	Pb212						

RADIOPHARM THERANOSTICS IS BUILDING A LEADERSHIP POSITION TARGETING MULTIPLE TUMOR TYPES & KEY PATHWAYS

	Cancer type	New Cases	RAD Pipeline	Target / MoA
1	Breast	280.000	✓ ✓	HER2 / TROP2
2	Prostate	248.000	✓	KLK3
3	Lung	235.000	✓	PDL1
4	Colorectal	149.000	✓	B7H3
5	Melanoma	106.000	✓	LRRC15
6	Bladder	83.000		
7	Kidney	76.000		
8	Uterine	66.000	✓	PTK7
9	Head & Neck	66.000	✓	INTEGRIN $\alpha v \beta 6$
10	Pancreatic	60.000	✓	INTEGRIN $\alpha v \beta 6$
	Glioblastoma	18.000	✓	FATTY ACID / PTP μ
	Osteosarcoma	1.000	✓	LRRC15



MDACC – RAD JV

IP EXPIRY

PATENT	DETAILS	EXPIRY
RAD PD-L1, HER-2, TROP-2, PTK7		
PCT/CN2017/077122 (PD-L1) CN201610158493.0 (PD-L1) PCT/CN2018/091953 (HER-2) CN 202110750848.6 (TROP-2) CN 202110950740.1 (PTK7)	PD-L1 Status: Int. Publication 2017; Granted US; allowed US, pending Europe & China	2036 (China) 2037 (US, Europe)
	HER-2 Status: Int. publication 2018; pending China, Europe & Japan, allowed US	2038
	TROP-2 Status: filed July 2021 in China; PCT filed 2022	2041 (earliest)
	PTK7 Status: filed August 2021 in China; PCT filed 2022	2041 (earliest)
RAD αVβ6 Integrin		
EP20162699.1 PCT/EP2021/056424	Status: Pending Europe, PCT filed	2040 (Europe) 2041 (PCT)
RAD Pivalate		
EP2994169	Status: Granted Europe	2034
US10,821,194	Status: Granted US	2034
US10,213,516	Status: Granted US	2035
RAD PSA-mAb		
PCT/EP2016/073684 PSA	Status: Int. Publication 2017; Granted US, Europe & Japan; pending various (incl. US continuation)	2037
PCT/US2012/061982 PSA mAb	Status: Int. Publication 2013; Granted Australia, China, Europe, Japan & Canada; allowed US; pending US continuation	2032
DUNP19		
First patent number 63/003,598 filed 18 Mar 2020 Patent number P-594449-PC claims priority PCT filed 2021 (PCT/US21/25054)	DUNP19	2041
PTPμ		
US Patents: 8,686,112 B2; 9,415,122 B2; 10,238,757	PTP μ	2037