Company Presentation – January 2024

RAD

RADIOPHARM THERANOSTICS

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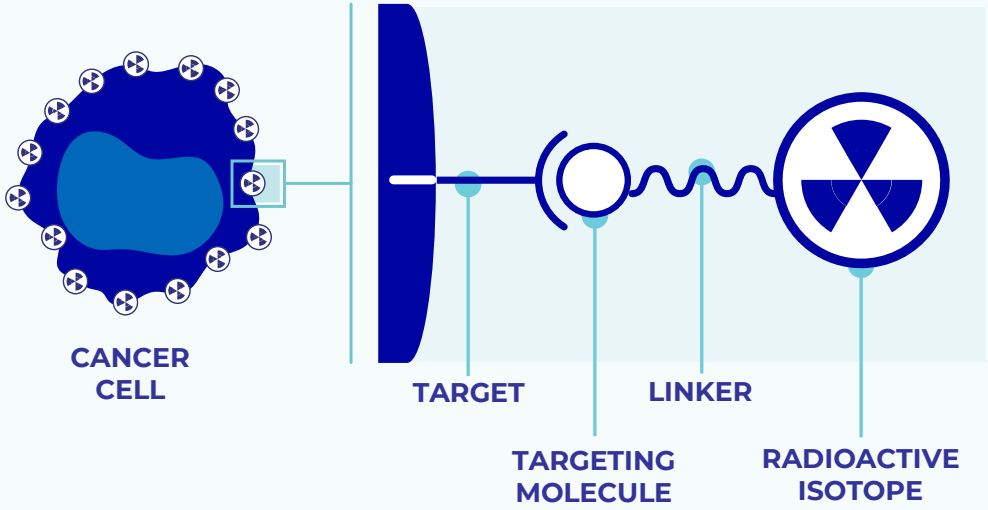
RADIOPHARMACEUTICALS DELIVER RADIATION DIRECTLY TO CANCER CELLS



Building Blocks of Radiopharmaceuticals

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

RADIOACTIVE ISOTOPE
Imaging Isotope to **SEE** the cancer cells
Therapeutic Isotope to **TREAT** cancer

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

Very high selectivity to cancer cells while limiting damage to healthy tissues

FDA-APPROVED RADIOPHARMACEUTICAL DRUGS BEATING EXPECTATIONS

Prostate Cancer Imaging

Combined analysts' peak sales consensus for:

Pylarify, Illucix

~$1,5B in 2024

PYLARIFY® Piflufolastat F 18 Injection

illuccix® (kit for the preparation of gallium Ga 68 gozetotide Injection)

LANTHEUS

Telix

FDA approved in 2021

Prostate Cancer Therapy

Analysts' peak sales consensus for:

Pluvicto

$3.0B in 2029

PLUVICTO™ lutetium Lu 177 vipivotide tetraxetan INJECTION FOR INTRAVENOUS USE

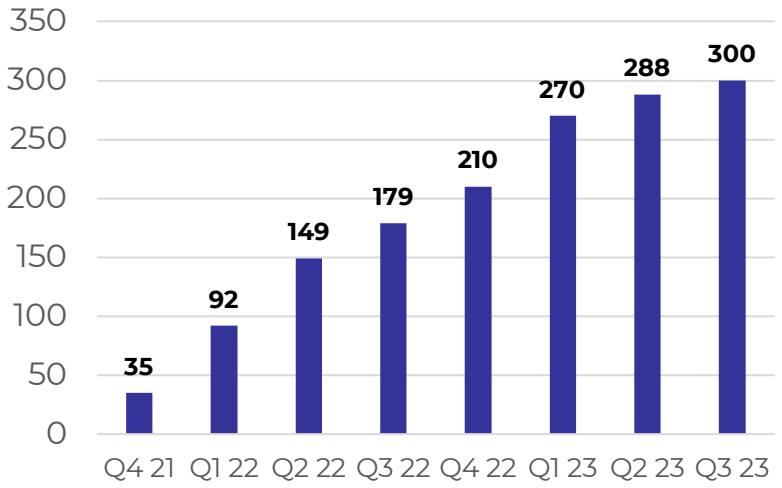
NOVARTIS

FDA approved in 2022

Recent M&A

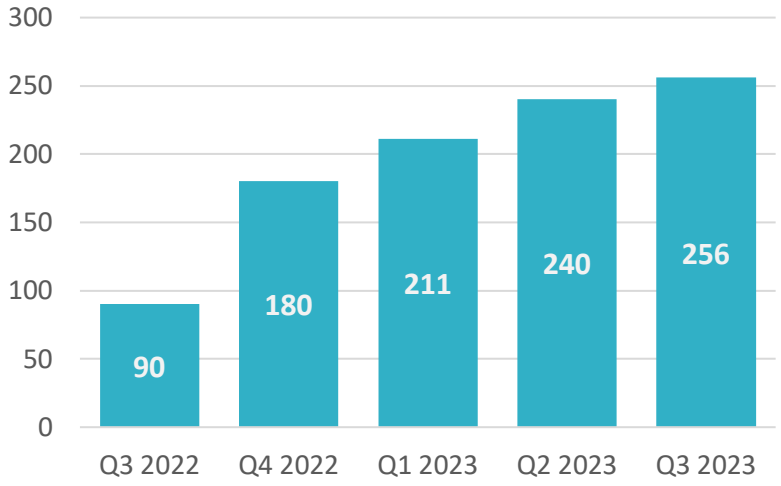
- ✓ BMS/RAYZEBIO ('23) – $4.1B acquisition
- ✓ ELI LILLY/POINT ('23) - $1.4B acquisition
- ✓ Roche/PeptiDream ('23) - $40m upfront
- ✓ Bayer/Bicycle ('23) - $45m upfront
- ✓ Novartis/Bicycle ('23) - $50m upfront
- ✓ Lantheus/POINT ('22) - $260m upfront

USD$ m – quarterly sales – Pylarify + Illucix



Lantheus and Telix quarterly reports

USD$ m – quarterly sales -Pluvicto



Novartis quarterly reports

RAD RADIOPHARM THERANOSTICS

COMPANY VISION & STRATEGY

SUCCESSFULLY FIGHT CANCER THROUGH INNOVATIVE RADIOPHARMACEUTICAL THERAPIES

Public Company (RAD : ASX) created in mid 2021

- Lean organization of 10 FTEs with low resource allocation to G&A
- Expanded partnerships and strategic alliances
- AUD$ 82m raised from July 2021 until today (AUD$ 50m IPO in Nov 2021)

In licensing strategy & Intellectual Property

- Late-stage preclinical molecules (12-18 months to Phase I) in-licensed from Top Universities or acquired from private companies
- Differentiated Targeting Molecules in indications/mechanism of actions where other radiopharmaceutical companies are not known to be focused
- Proprietary molecules designed to identify and target a broad range of malignancies, in solid tumors.
- Extensive patent portfolio for targets through 2040

Joint Venture RADIOPHARM VENTURES with MD Anderson Cancer Center

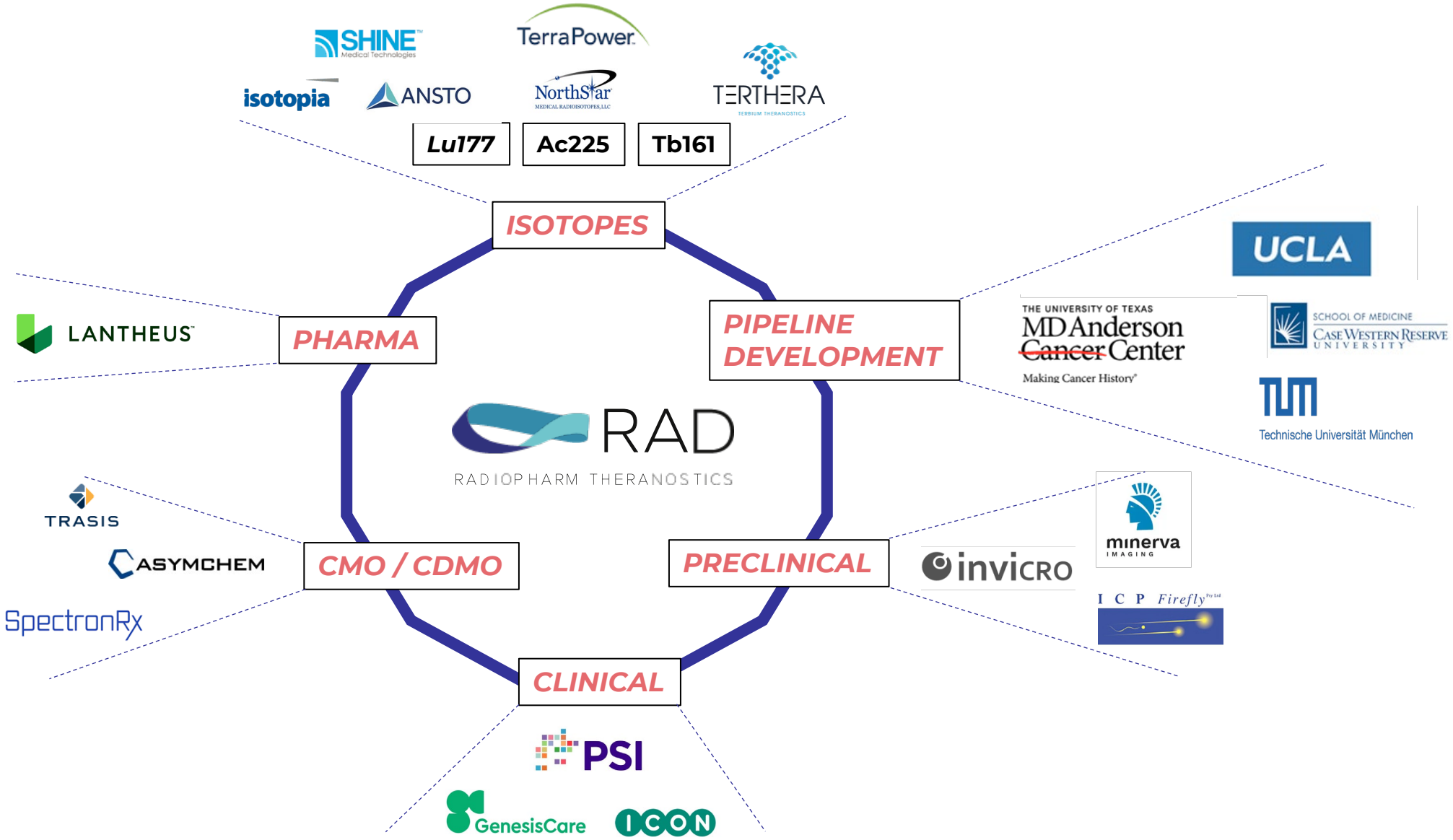
- JV in-licensed from MDACC four IP of Therapeutic radiopharmaceutical molecules
- Currently in preclinical stage, only one technology has been disclosed (B7H3 targeting molecule).

Deep Expertise in Radiopharmaceuticals

- All team members with previous Imaging or Therapeutic radiopharmaceutical experience
- Extensive Scientific Advisory Board of accredited multinational researchers

EXPANDED PARTNERSHIPS & STRATEGIC ALLIANCES

- UNIQUE BUSINESS MODEL: LOW CAPITAL INTENSITY, FLEXIBLE RESOURCE ALLOCATION



KEY MANAGEMENT TEAM

Paul Hopper
Executive Chairman

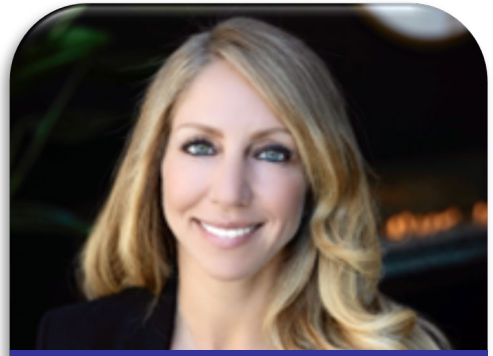
- Founder of Radiopharm Theranostics LTD.
- 25 years experience as a life-sciences entrepreneur
- Founder, Chairman, non-executive director or CEO of more than fifteen companies in the US, Australia and Asia
- Previous and current Boards include Imugene, Chimeric Therapeutics, Viralytics, Prescient Therapeutics, Polynoma and Arovella Therapeutics

Riccardo Canevari
Chief Executive Officer

- Radiopharm Theranostics CEO since September 2021
- Previously, Chief Commercial Officer of Novartis Company Advanced Accelerator Applications S.A.
- Lead for Lutathera in-market growth strategy & Pluvicto launch strategy
- Senior Vice President & Global Head, Breast Cancer Franchise, for Novartis Oncology since 2017

Vittorio Puppo
Chief Operating Officer

- Has served as Chief Operating Officer since June 2022.
- Previously, Chief Marketing Officer at Bracco Imaging, a world leader in diagnostics
- Managed businesses in Europe and Asia for Accuray, Covidien, Mallinckrodt and Amersham
- Board member of Life Sciences Capital



Dr. Sherin Al-Safadi
VP, Medical Affairs

- Served in the role since Aug 2023.
- Previously, VP Medical Affairs at Point Biopharma
- Lead Strategic & Tactical planning radiopharmaceutical Phase III programs
- Global Director, Medical Affairs at Bayer

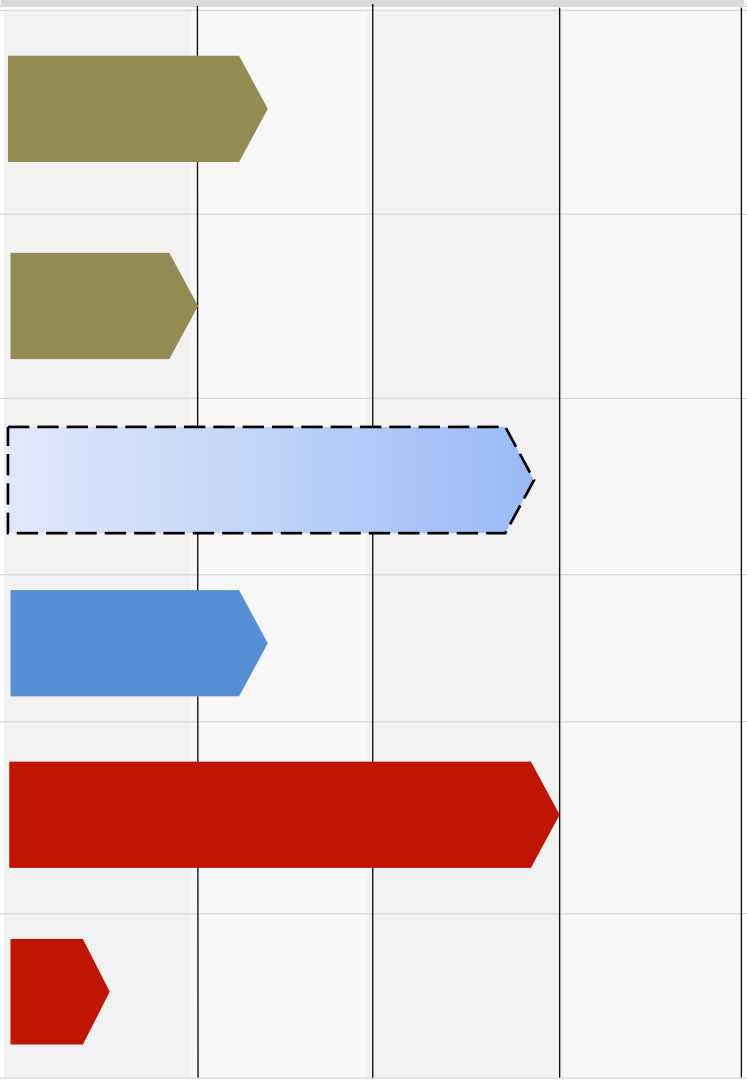
Vimal Patel
VP, CMC

- Served in the role since September 2023
- Previously Vice President, Head of CMC and Supply Chain at Orum Therapeutics
- Led the successful manufacture of two ADCs and contributed to filing an IND leading to a Phase-I trial.
- Director of Process Sciences and Manufacturing at Actinium Pharmaceuticals

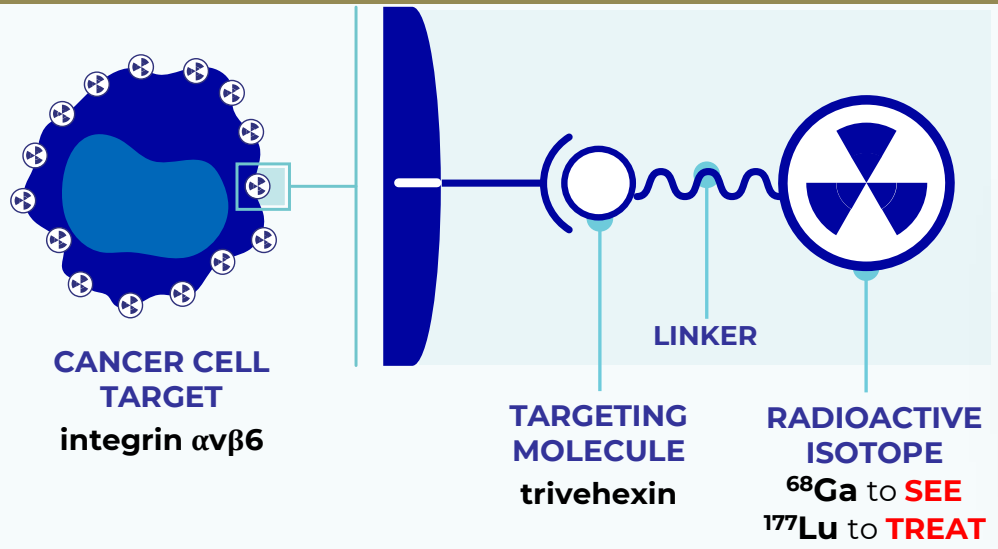
CLINICAL DEVELOPMENT PRIORITIES

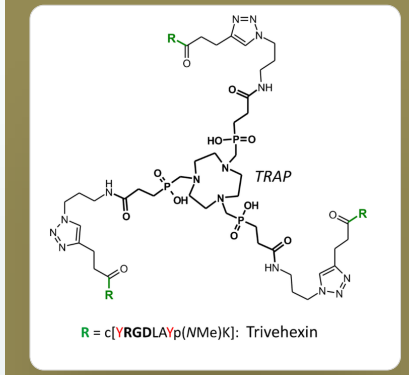
RADIOPHARM THERANOSTICS

RAD CODE	MOLECULE & TARGET	INDICATION	Dx/Tx	ISOTOPE	NOTES
RAD301	TRIVEHEXIN ($\alpha V\beta 6$ Integrin)	PANCREATIC CANCER	Imaging	Ga68	Phase 1 enrolling in the USA READ-OUT by Q2 2024
RAD302			Therapy	Lu177	GMP production to be completed by Q2 2024 IND approval for Phase I by Q4 2024
RAD203	Nanobody (PD-L1)	Non-Small Cell LUNG CANCER	Imaging	Tc99	RAD Territory rights: China only Licensed by LANTHEUS (worldwide ex-China) Phase II close to completion
RAD204			Therapy	Lu177	Phase 1 trial activated Jan 4th, 2024, and enrolling in AUSTRALIA > 50% recruitment expected by Q4 2024
RAD101	PIVALATE (Fatty Acid Synthetase)	BRAIN METS	Imaging	F18	Phase 2a successfully completed. IND preparation for Phase 2b multicenter trial in USA in 30 patients READ-OUT by Q4 2024
RAD102			Therapy	Not disclosed	R&D stage Candidate selection at Imperial College of London; to be completed Q4 2024



TRIVEHEXIN: Imaging and Therapy for Pancreatic Cancer





TRIVEHEXIN

RGD peptide (arginylglycylaspartic acid)

Integrin αvβ6 receptor antagonist

- Marker for tumour invasion and metastatic growth
- Expression correlates with decreased survival in numerous carcinomas

IMAGING WITH PET TECHNOLOGY

- High unmet need in detecting and monitoring pancreatic cancer metastasis
- Current standard of care (FDG & MRI) have significant limitations
- Orphan Drug Designation granted (5/2023)

THERAPY FOR αvβ6 INTEGRIN EXPRESSING TUMORS

- Pancreatic cancer is the first targeted indication
- Multi-indication potential beyond PDAC (Head & Neck, NSCLC, TNBC, Colorectal)

RAD 301 Imaging: Ga68-TRIVEHEXIN

CLINICAL DEVELOPMENT & REGULATORY STRATEGY

- 66 patients already dosed under compassionate use (solid safety profile)
- 33 patients dosed under Investigator Initiated Research (presented at EANM 9/2023)
- IND approved Phase I started, followed by registrational trial (leveraging RWE data)
- USD 240m peak yearly sales potential in Imaging PDAC (Bell Potter independent report)
- Only 1 expected competitor: Integrin αvβ6 - αvβ1 (UC Davis) currently in Phase I

COMPASSIONATE USE (Germany)	Pilot study in PDAC + H&N	PHASE I	PHASE II	PHASE III	APPROVAL & COMMERCIAL LAUNCH
66 pts	33pts	9 pts	~100 pts		
√	√	ongoing	June 2024 – June 2025		2H 2026

RAD301 Clinical Development Began Under German Medical Drug Act, supported by European partner TRIMT

68Ga-trivehexin PET/MRI Imaging Patients with Pancreatic Tumours

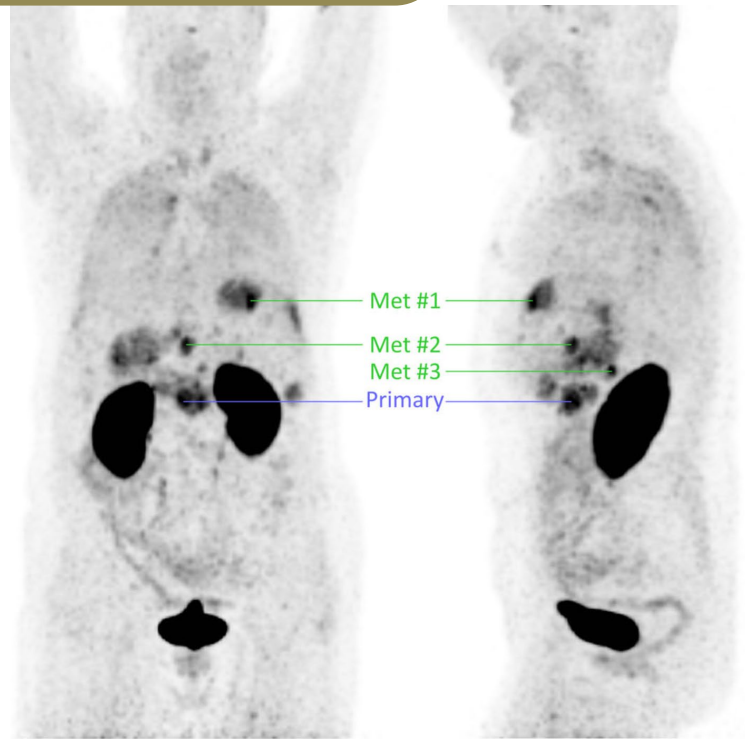
TRIAL ANALYSED:

- Selective detection of αvβ6 integrin-expressing tumour lesions in patients with PDAC
- 66 patients administered RAD301 (as of 2022)
  - 60 pancreatic cancer and GI tumours
  - 5 with head and neck cancer
  - 1 patient with tumour of unknown origin

Results Indicate that RAD301 can be used to detect and monitor pancreatic cancer

- Rapid and specific accumulation in many target PDAC primary lesions and metastases
- Low background accumulation and purely renal elimination

68Ga-TRIVEHEXIN PDAC IMAGING



from Quigley NG Notni J. Eur J Nucl Med 2021

RAD301 Clinical Development: Investigator Initiated Trial at Fortis Medical Center, supported by TRIMT

68Ga-trivehexin PET/CT Imaging vs F18-FDG

TRIAL ANALYSED:

- Selective detection of αvβ6 integrin-expressing tumour lesions in patients with PDAC & HNSCC
- 33 patients administered RAD301

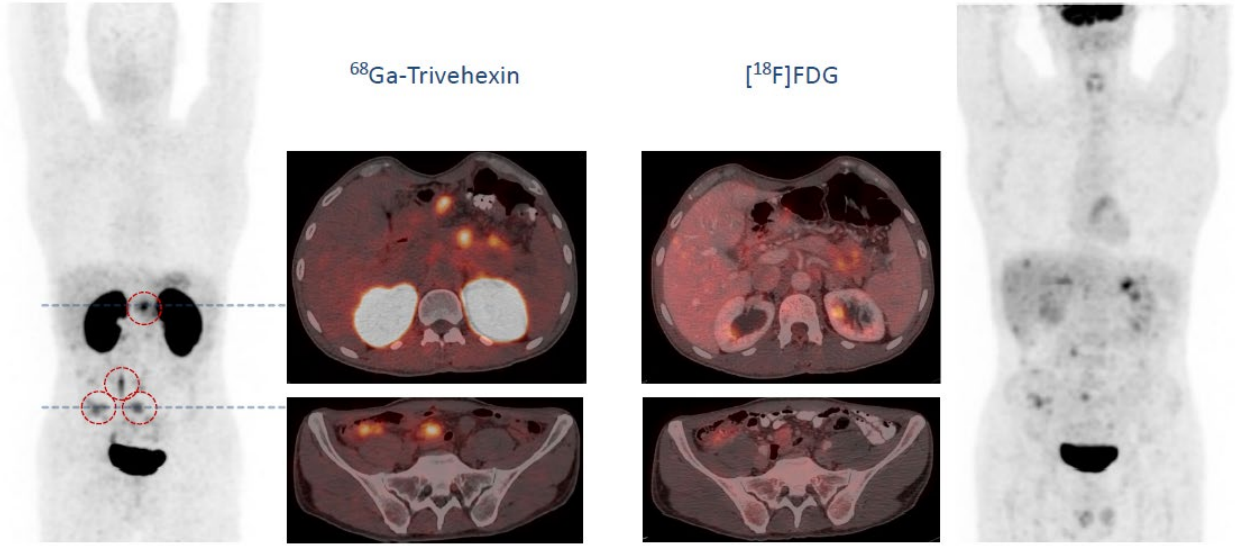
Data presented at World Theragnostic Congress 2022 (Wiesbaden, Germany) & follow up presented at EANM 9/2023 (Vienna)

Results Indicate that RAD301 shows incremental value over F18-FDG in PDAC & HNSCC

- Favorable tumour-to-background contrast vs F18-FDG
- Sharper images and negligible uptake in the surrounding normal tissue

68Ga-trivehexin PDAC imaging shows superior resolution vs F18-FDG

^{68}Ga-Trivehexin *vs.* [^{18}F]FDG—Metastatic PDAC in the Pancreatic Tail



Images courtesy of Dr. Ishita Sen, Fortis Medical, New Delhi, India

TRIVEHEXIN Imaging: PROJECTED REVENUE OPPORTUNITIES

Cancer Type	New US Cases Per Annum	Eligible New Patients Per Annum	Price Per Dose	Revenue Opportunity Per Annum
Imaging **Pancreatic Cancer**	**124,000** Source: SEER database US incidence	***99,000***	**USD $5,000**	***USD 240m***

Source: Bell Potter analyst report

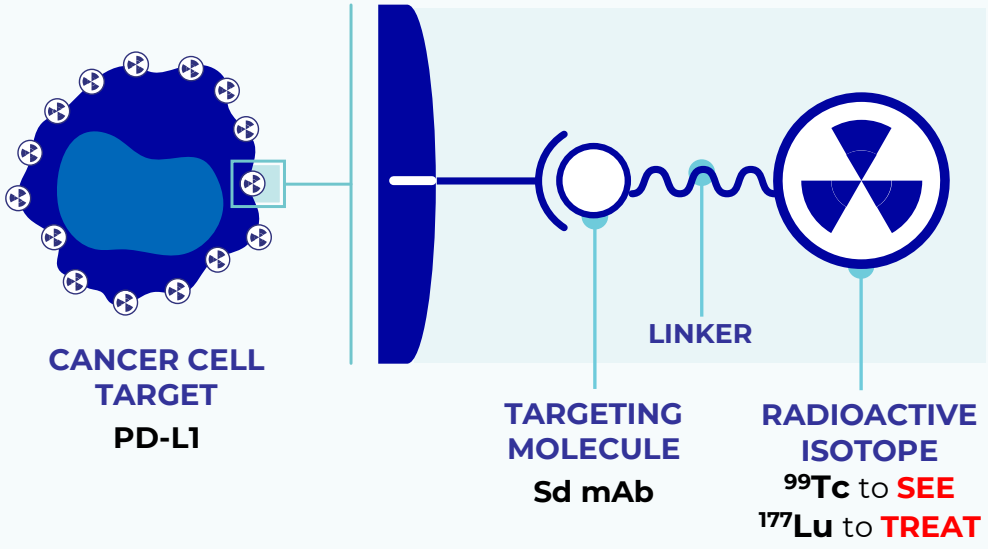
NB. The above information relates to the potential addressable market. RAD's ability to generate revenue is subject to successful commercialisation, regulatory approval and distributions and sales arrangements, unless an earlier liquidity event occurs.

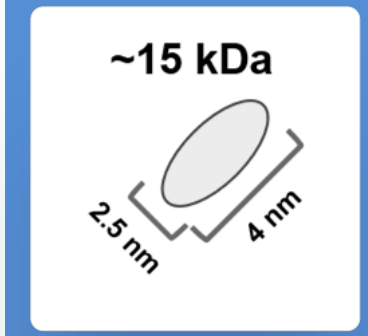
RAD 302 Therapeutic: Lu177-TRIVEHEXIN

CLINICAL DEVELOPMENT & REGULATORY STRATEGY

- GMP peptide production ongoing
- GLP Tox and Biodistribution study by mid-2024
- IND submission and approval in H2
- Phase I dose escalation basket trial (multiple indications) to be started by year-end.

NANOBODY PD-L1: IMAGING AND THERAPY FOR LUNG CANCER





PD-L1 NANOMAB

Single domain monoclonal antibody (Sd mAb)

PD-L1 Immune Checkpoint Protein

- Overexpression mediates evasion of immune responses by cancer cells
- Blockade by antibodies leads to tumour regression

IMAGING WITH SPECT TECHNOLOGIES

- Phase II imaging ongoing in non-small cell lung cancer
- Lantheus licensed Worldwide Rights (ex-China)
- RAD owns China rights
- RAD-LANTHEUS agreement signed for data sharing

THERAPY

- 200,000* new patients with NSCLC every year in USA
- ~70% of patients refractory to Check Point Inhibitors therapies
- Combination therapy with Checkpoint Inhibitors (overcome ICI resistance + abscopal effect)

*Source: SEER database US incidence

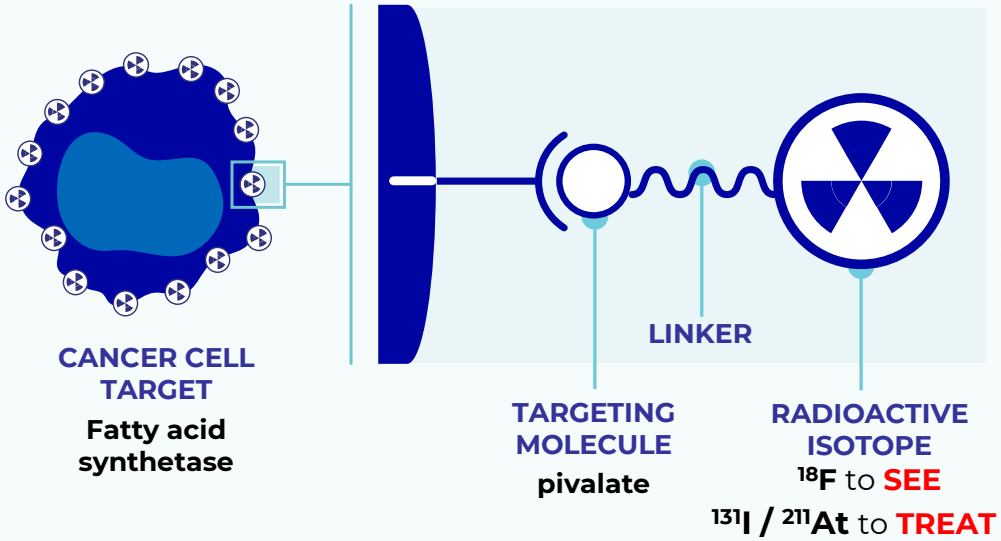
RAD 204 Therapeutic: NANOMAB PD-L1

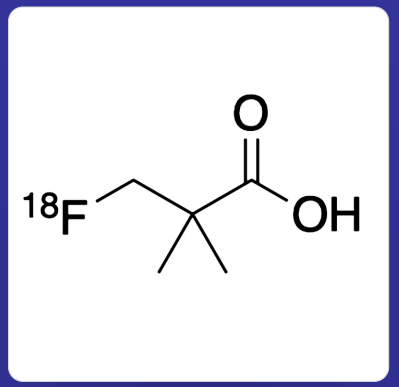
CLINICAL DEVELOPMENT & REGULATORY STRATEGY

- Human pharmacokinetic and Biodistribution validated with Imaging agent (positive Phase I in 16pts)
- Phase I therapeutic dose escalation in Australia started
- Phase II combo therapy trial with checkpoint inhibitor
- No other PDL1 radiopharmaceuticals in preclinical or clinical development

PRECLINICAL	Imaging PHASE I	Therapeutic PHASE I	PHASE II
	16pts	27 pts	50 pts
√	√	Q1 2024– Q2 2025	Q4 2025 – Q3 2027

PIVALATE: Imaging and Therapy for Brain Metastases





F18-PIVALATE

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

IMAGING with PET TECHNOLOGY

- 300,000* new patients every year in USA only
- MRI current standard of care, but has limitations in patients post-surgery or post-stereotactic radiation surgery (pseudo-progression)

THERAPY

- R&D stage for candidate selection at Imperial College of London
- Isotope selection based on chemical stability
- Potential use beyond Brain Mets (i.e. Gliomas)

* Source: SEER database US incidence

RAD 101 Imaging: F18-PIVALATE

CLINICAL DEVELOPMENT & REGULATORY STRATEGY

- Ongoing Tech transfer from UK to USA. IND approval after Tech transfer finalized
- 21 months to complete late-stage development (Phase IIb + Phase III)
- ~30 months to anticipated NDA Approval and first commercial sales
- USD 364m peak yearly sales potential (Jones Group independent report)
- Only 1 expected competitor: Axumin (Bracco) currently in Phase III

PRECLINICAL	PHASE I	PHASE IIa	PHASE 2b	PHASE 3	APPROVAL & COMMERCIAL LAUNCH
	24 pts	17 pts	30 pts	150 pts	
√	√	√	Q1 – Q4 2024	Q1 2025 – Q1 2026	2H 2026

Pivalate Delivers Positive Phase II Data in Brain Metastasis Trial

RAD101 Phase IIa Clinical Trial: F18-pivalate PET/MRI Imaging

Patients with one or more cerebral metastases from primary tumours of differentorigin; breast, lung, melanoma & colorectal cancer

TRIAL ANALYSED:

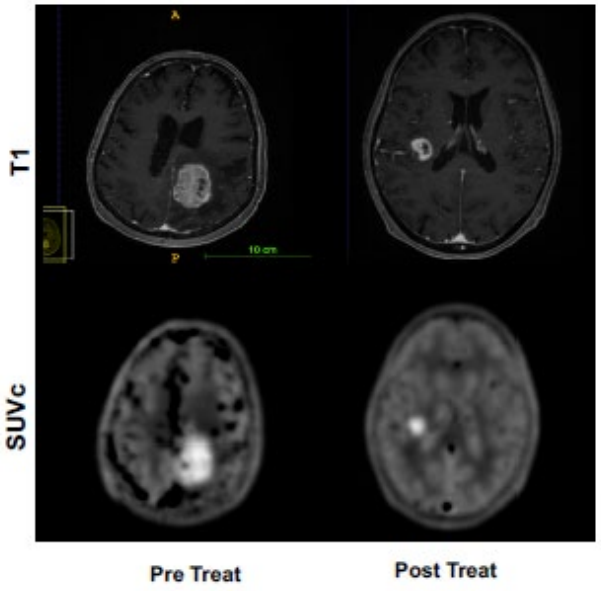
- Selective F18-pivalate uptake in cerebral metastases
- Impact of Stereotactic Radiosurgery (SRS) on F18-pivalate uptake at early time points (4-8 weeks)
- 2 cohorts of patients: 11 treatment naïve & 6 SRS treated (4-8 weeks post treatment)

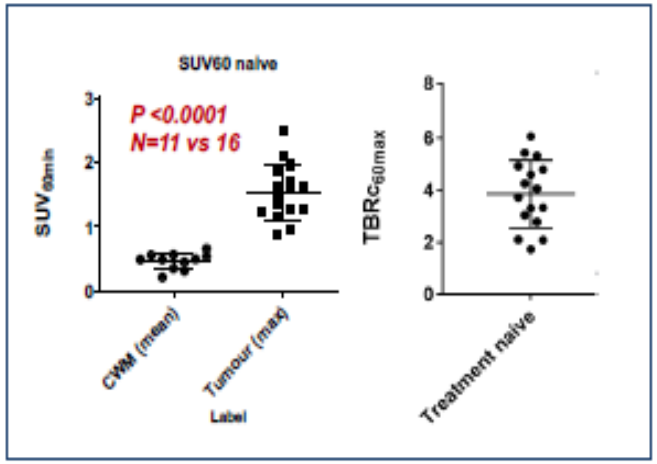
RESULTS

F18-pivalate PET showed high uptake independent of origin of primary tumour

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

- Patients without previous external beam radiation showed higher tumour uptake of RAD 101
- Previously treated patients show trend towards lower RAD 101 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

PIVALATE: IMAGING PROJECTED REVENUE OPPORTUNITIES

Cancer Type	New US Cases Per Annum	Eligible New Patients Per Annum	Price Per Dose	Revenue Opportunity Per Annum
Imaging **Brain Metastasis**	**300,000** Source: SEER database US incidence	***88,000***	**USD $4,730**	***USD 364m***

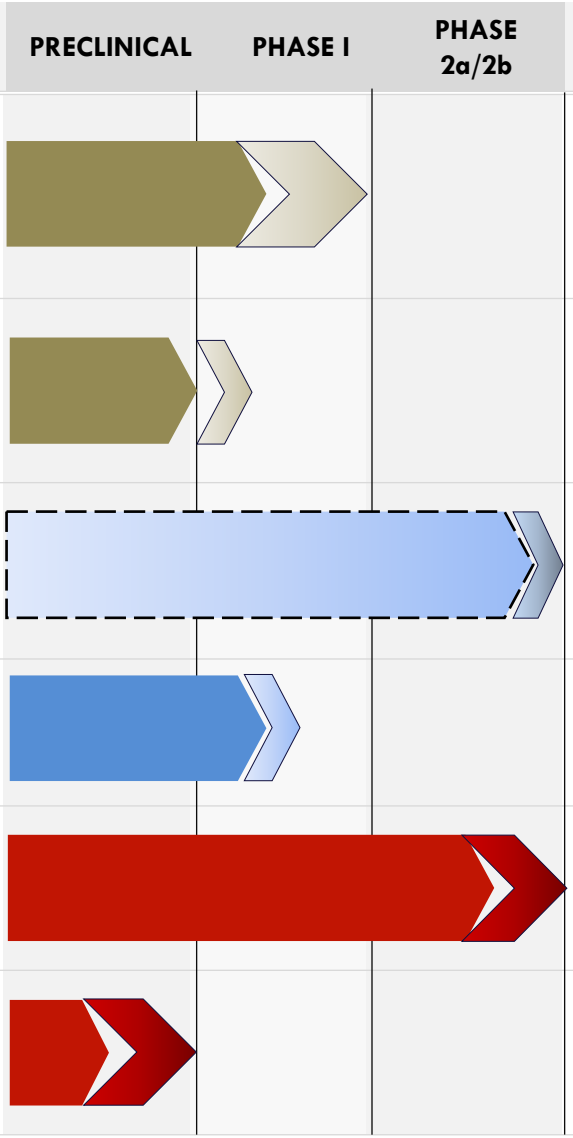
Source: Jones Group analyst report

NB. The above information relates to the potential addressable market. RAD's ability to generate revenue is subject to successful commercialisation, regulatory approval and distributions and sales arrangements, unless an earlier liquidity event occurs.

INFLECTION POINTS IN 2024:

2 IMAGING TRIAL READ-OUTS; ADVANCING THERAPEUTIC MOLECULES

RAD CODE	MOLECULE & TARGET	INDICATION	Dx/Tx	ISOTOPE	2024 EVENTS
RAD301	**TRIVEHEXIN** ($\alpha V\beta 6$ Integrin)	**PANCREATIC CANCER**	Imaging	Ga68	**PHASE I READ-OUT by Q2**
RAD302			Therapy	Lu177	PHASE I to be started by Q4
RAD203	**Nanobody** (PD-L1)	**Non-Small Cell LUNG CANCER**	Imaging	Tc99	*Managed by Lantheus; Phase II read-out mid-2024* RAD seeking licensing for China rights (after Phase II read-out)
RAD204			Therapy	Lu177	Phase 1 enrolled > 50% by Dec
RAD101	**PIVALATE** (Fatty Acid Synthetase)	**BRAIN METS**	Imaging	F18	Phase IIa completed successfully **Phase IIb READ-OUT by Q4**
RAD102			Therapy	Not disclosed	Candidate selection by Q4



POTENTIAL FOR SIGNIFICANT SHAREHOLDER VALUE CREATION

SOME RELEVANT PEER-TO-PEER COMPARISON

	Public	Public	Public	Private	Private
	RAD RADIOPHARM THERANOSTICS	PERSPECTIVE THERAPEUTICS	Fusion Pharmaceuticals Inc.	PRECIRIX	mariana ONCOLOGY
FDA INDs or other Regulatory approval for clinical trials (EU, AUS, UK…)	3	3	4	3	-
Phase I imaging ongoing	1	1	-		-
Phase II Imaging ongoing	1		-	2	-
Phase I therapy ongoing	1	2	2	1	-
Phase II therapy ongoing			1		-
Market Cap in USD$*	25M	126M	690M	130M	250M

* Jan 16th , 2024

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