



EGM Presentation – August 2024

IMPORTANT NOTICE AND DISCLAIMER

The information in this presentation does not constitute personal investment advice. The presentation is not intended to be comprehensive or provide all information required by investors to make an informed decision on any investment in Radiopharm Theranostics Ltd ACN 647 877 889 (Company). In preparing this presentation, the Company did not take into account the investment objectives, financial situation and particular needs of any particular investor. Further advice should be obtained from a professional investment adviser before taking any action on any information dealt with in the presentation. Those acting upon any information without advice do so entirely at their own risk.

Whilst this presentation is based on information from sources which are considered reliable, no representation or warranty, express or implied, is made or given by or on behalf of the Company, any of its directors, or any other person about the accuracy, completeness or fairness of the information or opinions contained in this presentation. No responsibility or liability is accepted by any of them for that information or those opinions or for any errors, omissions, misstatements (negligent or otherwise) or for any communication written or otherwise, contained or referred to in this presentation. Neither the Company nor any of its directors, officers, employees, advisers, associated persons or subsidiaries are liable for any direct, indirect or consequential loss or damage suffered by any person as a result of relying upon any statement in this presentation or any document supplied with this presentation, or by any future communications in connection with those documents and all of those losses and damages are expressly disclaimed.

Certain statements contained in this presentation, including, without limitation, statements containing the words “believes,” “plans,” “expects,” “anticipates,” and words of similar import, constitute “forward-looking statements.” Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, the following: the risk that our clinical trials will be delayed and not completed on a timely basis; the risk that the results from the clinical trials are not as favourable as we anticipate; the risk that our clinical trials will be more costly than anticipated; and the risk that applicable regulatory authorities may ask for additional data, information or studies to be completed or provided prior to their approval of our products. Given these uncertainties, undue reliance should not be placed on such forward-looking statements. The Company disclaims any obligation to update any such factors or to publicly announce the results of any revisions to any of the forward-looking statements contained herein to reflect future events or developments except as required by law.

This presentation is not a prospectus or other disclosure document under the *Corporations Act 2001* (Cth) and will not be lodged with the Australian Securities and Investments Commission. This presentation is for information purposes only and is not an invitation or offer of securities for subscription, purchase or sale in any jurisdiction. The distribution of this presentation (including electronically) outside Australia may be restricted by law. If you come into possession of this presentation, you should observe such restrictions as any non-compliance with these restrictions could contravene applicable securities laws (see the section captioned ‘International offer restrictions’). In particular, this document does not constitute an offer to sell, or a solicitation of an offer to buy, securities in the United States. The New Shares have not been, and will not be, registered under the US Securities Act of 1933 and may not be offered or sold in the United States except in transactions exempt from, or not subject to, the registration requirements of the US Securities Act and applicable US state securities laws.

Any opinions expressed reflect the Company’s position at the date of this presentation and are subject to change.

RAD IS AT THE CUTTING EDGE OF RADIOPHARMACEUTICALS, A TRANSFORMATIVE MODALITY WITHIN CANCER TREATMENT

1

Differentiated Within Radiopharmaceuticals

- Clinical-stage company with deep pipeline of radiotherapeutic assets pursuing novel targets, leveraging insights from ADCs, using innovative targeting moieties such as nanobodies
 - Targets include PD-L1, HER2, TROP2 (nanobody platform); integrin $\alpha V\beta 6$ (peptide) fatty acid synthase (small molecule)
 - Preclinical technologies (mAb-based)

2

Radiopharm Ventures, a Joint Venture with MD Anderson Cancer Center

- JV (private company) in-licensed from MDACC technologies for radiopharmaceuticals use
- First technology has been disclosed (B7H3-targeting molecule)

3

Radiopharmaceuticals Expertise, In licensing Strategy & Intellectual Property

- All team members with previous imaging and therapeutic radiopharmaceutical experience
- Extensive Scientific Advisory Board of accredited multinational researchers
- Proprietary molecules designed to identify and target a broad range of malignancies in solid tumors
- Extensive patent portfolio for targets through 2040

4

Lantheus Strategic Investment

- Lantheus Holdings, Inc (LNTH.NASDAQ, Market Cap approximately US\$7Bn) has entered into agreement with Radiopharm to invest, subject to shareholder approval, ~A\$7.6m. Shares to be acquired at A\$0.05, which represents a ~47% premium to the last closing price on 19 June 2024 and a ~57% premium to the 5-day VWAP. Option to invest a further ~A\$7.6m within 6 months
- Under a separate agreement, Lantheus has secured rights over two early preclinical assets in exchange for a ~A\$3m upfront payment

5

Strong Cash and Funding Position Post Capital Raising

- A\$70.0m raised via a two-tranche placement at an Offer Price of A\$0.04 per share, representing a 17.6% premium to the closing price of Radiopharm's shares on 19 June 2024
- Subject to shareholder approval, Executive Chairman, Paul Hopper, will be participating for A\$3m under the Offer
- Post completion of the capital raise, Radiopharm will be fully funded to support its current clinical programs beyond mid 2026

LANTHEUS STRATEGIC INVESTMENT

Lantheus Holdings Inc (LNTH.NASDAQ, market cap approximately US\$7Bn) is a global leader in the development, manufacture and commercialisation of diagnostic and therapeutic radiopharmaceutical products with offices in Massachusetts, New Jersey, Canada and Sweden.



Lantheus is investing ~A\$7.6m into Radiopharm

Shares to be acquired at \$0.05 per share. A ~57% premium to the 5-day VWAP

Lantheus will secure rights over two early preclinical assets for a A\$3m upfront payment

Global rights for RAD 206 Development (TROP-2) and RAD 502 (DUNP19) in exchange for a A\$3 million upfront payment

Option to invest a further ~A\$7.6m within 6 months

Additional investment to be made at \$0.05 per share. A ~57% premium to the 5-day VWAP

"We are pleased to make a strategic investment in RAD and partner with them to further expand our innovative pipeline.

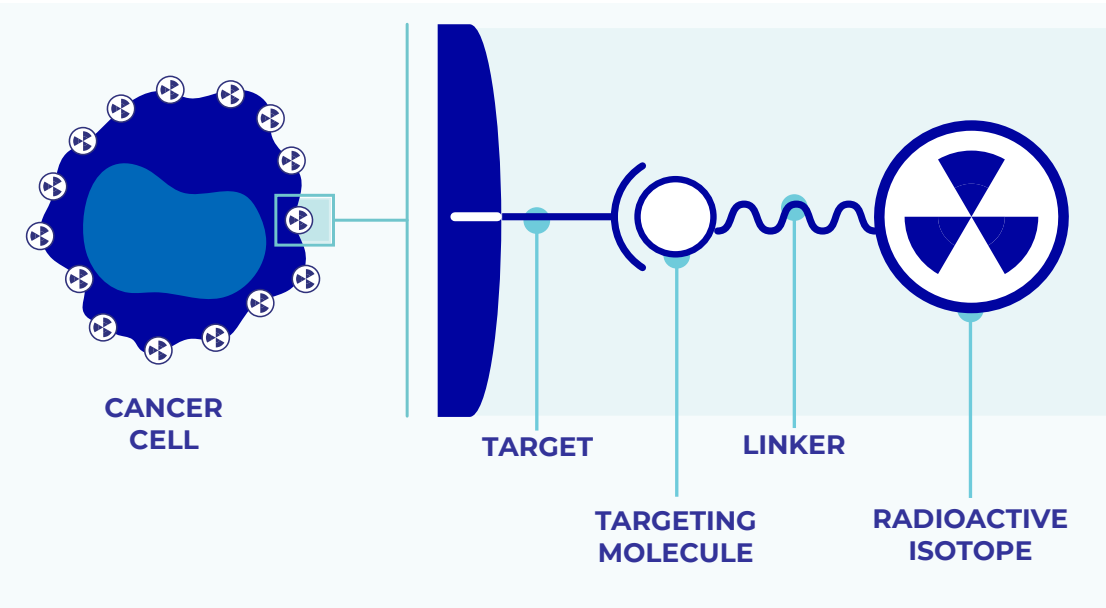
Radiopharmaceutical theranostics are changing the way cancer is diagnosed and treated, yet we still have more work to do and are inspired to further advance this field with these two preclinical oncology assets."

Brian Markison, Chief Executive Officer of Lantheus

* Subject to shareholder approval. Shares subscribed for by Lantheus will be escrowed for 12 months from allotment date

* Assumes an AUD/USD exchange rate of \$0.66

RADIOPHARMACEUTICALS DELIVER RADIATION DIRECTLY TO CANCER CELLS



Building Blocks of Radiopharmaceuticals	Considerations
Targeting Molecule (high affinity small molecule, peptide or antibody)	Serum half-life, immunogenicity, tumor uptake and retention, plasma clearance (especially via renal system)
Radioactive Isotope (imaging / therapeutic)	Target heterogeneity, tissue anatomy, desired cross-fire effect, mechanism of cytotoxicity, imaging properties
Linker (joins targeting molecule and radioactive isotope)	Stability, uptake in desired versus undesired organs

Imaging

SEE and measure disease with radioactive isotopes

Imaging compounds precisely 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

EXPANDING RADIOPHARMACEUTICAL TARGETS AND INDICATIONS

Novel Radiopharmaceutical Targets With Validated Biology beyond PSMA, SSTR2, FAPI

PD-L1, HER2, (nanobodies); $\alpha V\beta 6$ Integrin (peptide), fatty acid synthase (small molecule)

Tuned Isotope Selection

Lu177 (beta), ***Ac225*** (alpha), ***Tb161*** (beta + Auger)

Optimized Binding Moieties

Nanobodies, high affinity peptides, small molecules

Supply Chain Enhancement

SHINE
Health. Illuminated.

ANSTO


NorthStar
MEDICAL RADIOISOTOPES, LLC

isotopia
Nuclear Medicine

TerraPower
A Nuclear Innovation Company

TERTHERA
TERTHERA THERANOSTICS

COMPANY PIPELINE

PROGRAM	TARGET & MOLECULE	INDICATION	Dx/Tx	ISOTOPE	PRECLINICAL	PHASE I	PHASE II	NOTES
RAD204	PD-L1 (Nanobody)	NON-SMALL CELL LUNG CANCER	Therapy	Lu177	<div><div></div></div>			Phase 1 enrolling in Australia, NCT06305962
RAD202	HER 2 (Nanobody)	BREAST / GASTRIC CANCER	Therapy	Lu177	<div><div></div></div>			Ethics approval in Q3 2024 Phase 1 trial starting in Q4 2024
RAD301	Integrin $\alpha V\beta 6$ (Peptide)	PANCREATIC CANCER	Imaging	Ga68	<div><div></div></div>			Phase 1 enrolling in the US, NCT05799274
RAD302			Therapy	Lu177	<div><div></div></div>			Phase 1 trial planned in 2025
RAD101	Fatty Acid Synthase (Small Molecule)	BRAIN METS	Imaging	F18	<div><div></div></div>		Phase 2a Phase 2b	IND approval received for Phase 2b in US (n=30)
RAD102			Therapy	I123	<div><div></div></div>			Preclinical studies progressing
RAD402	KLK3 (mAb)	PROSTATE	Therapy	Tb161	<div><div></div></div>			CMC production, BioD, GLP Tox studies ongoing
RV01	B7H3 (mAb)	Multiple Solid Tumors	Therapy	Lu177	<div><div></div></div>			CMC production, BioD, GLP Tox studies ongoing

Compassionate use and Imaging trials derisked clinical development: 172 patients already dosed

	PRE-CLINICAL	COMPASSIONATE USE	PHASE 1	PHASE 1/2	PHASE 2/2b	PHASE 2/3
Pivalate F18 Small molecule RAD 101			n=24 Imaging	n=17 Imaging Phase 2a	2H2024 n=30 Imaging	2026 n=150 Imaging
Integrins Peptide RAD 301		n=99 Imaging	n= 9 Imaging		1H 2025 n=30	2026 n=100 Imaging
PD-L1 Nanobody RAD 204			n=16 Imaging	n=27 Phase 1 Therapeutic	1H 2026 n=50 Therapeutic	
Her-2 Nanobody RAD 202			n=16 Imaging	2H2024 n=21 Phase 1 Therapeutic	2h2026 n=50 Therapeutic	
PSA Antibody 402				2H 2025 n=21 Phase 1 Therapeutic		
B7H3 Antibody RV01				2H 2025 n=21 Phase 1 Therapeutic		

Pre-Clinical
 Completed
 Recruiting
 Future

Upcoming Milestones: 4 data read-outs in the next 18-24 months

					1 H 2024	2 H 2024	1 H 2025	2 H 2025	1 H 2026
PROGRAM	TARGET & MOLECULE	INDICATION	Dx/Tx	ISOTOPE					
RAD204	PD-L1 (Nanobody)	NON-SMALL CELL LUNG CANCER	Therapy	Lu177	P1 in Aus			read-out	
RAD202	HER 2 (Nanobody)	BREAST / GASTRIC CANCER	Therapy	Lu177	P1 in Aus			read-out	
RAD301	Integrin $\alpha V\beta 6$ (Peptide)	PANCREATIC CANCER	Imaging	Ga68	P1 in USA		read-out		
RAD302			Therapy	Lu177	P1 in USA				
RAD101	Fatty Acid Synthase (Small Molecule)	BRAIN METS	Imaging	F18	P2b in USA			read-out	
RAD102			Therapy	I123	P1 in USA				
RAD402	KLK3 (mAb)	PROSTATE	Therapy	Tb161	P1 in Aus				
RV01	B7H3 (mAb)	MULTIPLE SOLID TUMORS	Therapy	Lu177	P1 in USA				



CONTACT US

Riccardo Canevari

CEO & MANAGING DIRECTOR

Radiopharm Theranostics Limited

T +1 862 309 0293

E rc@radiopharmtheranostic.com

W www.radiopharmtheranostics.com

Paul Hopper

Executive Chairman

Radiopharm Theranostics Limited

T +61 406 671 515

E paulhopper@lifescienceportfolio.com

W www.radiopharmtheranostics.com