

Radiopharm Theranostics Limited (ASX: RAD)

Initiation of Coverage

14 December 2021

WHO IS IIR?

Independent Investment Research, "IIR", is an independent investment research house based in Australia and the United States. IIR specialises in the analysis of high quality commissioned research for Brokers, Family Offices and Fund Managers. IIR distributes its research in Asia, United States and the Americas. IIR does not participate in any corporate or capital raising activity and therefore it does not have any inherent bias that may result from research that is linked to any corporate/ capital raising activity.

IIR was established in 2004 under Aegis Equities Research Group of companies to provide investment research to a select group of retail and wholesale clients. Since March 2010, IIR (the Aegis Equities business was sold to Morningstar) has operated independently from Aegis by former Aegis senior executives/shareholders to provide clients with unparalleled research that covers listed and unlisted managed investments, listed companies, structured products, and IPOs.

IIR takes great pride in the quality and independence of our analysis, underpinned by high calibre staff and a transparent, proven and rigorous research methodology.

INDEPENDENCE OF RESEARCH ANALYSTS

Research analysts are not directly supervised by personnel from other areas of the Firm whose interests or functions may conflict with those of the research analysts. The evaluation and appraisal of research analysts for purposes of career advancement, remuneration and promotion is structured so that non-research personnel do not exert inappropriate influence over analysts.

Supervision and reporting lines: Analysts who publish research reports are supervised by, and report to, Research Management. Research analysts do not report to, and are not supervised by, any sales personnel nor do they have dealings with sales personnel.

Evaluation and remuneration: The remuneration of research analysts is determined on the basis of a number of factors, including quality, accuracy and value of research, productivity, experience, individual reputation, and evaluations by investor clients.

INDEPENDENCE – ACTIVITIES OF ANALYSTS

IIR restricts research analysts from performing roles that could prejudice, or appear to prejudice, the independence of their research.

Pitches: Research analysts are not permitted to participate in sales pitches for corporate mandates on behalf of a Broker and are not permitted to prepare or review materials for those pitches. Pitch materials by investor clients may not contain the promise of research coverage by IIR.

No promotion of issuers' transactions: Research analysts may not be involved in promotional or marketing activities of an issuer of a relevant investment that would reasonably be construed as representing the issuer. For this reason, analysts are not permitted to attend "road show" presentations by issuers that are corporate clients of the Firm relating to offerings of securities or any other investment banking transaction from that our clients may undertake from time to time. Analysts may, however, observe road shows remotely, without asking questions, by video link or telephone in order to help ensure that they have access to the same information as their investor clients.

Widely-attended conferences: Analysts are permitted to attend and speak at widely-attended conferences at which our firm has been invited to present our views. These widely-attended conferences may include investor presentations by corporate clients of the Firm.

Other permitted activities: Analysts may be consulted by Firm sales personnel on matters such as market and industry trends, conditions and developments and the structuring, pricing and expected market reception of securities offerings or other market operations. Analysts may also carry out preliminary due diligence and vetting of issuers that may be prospective research clients of ours.

INDUCEMENTS AND INAPPROPRIATE INFLUENCES

IIR prohibits research analysts from soliciting or receiving any inducement in respect of their publication of research and restricts certain communications between research analysts and personnel from other business areas within the Firm including management, which might be perceived to result in inappropriate influence on analysts' views.

Remuneration and other benefits: IIR procedures prohibit analysts from accepting any remuneration or other benefit from an issuer or any other party in respect of the publication of research and from offering or accepting any inducement (including the selective disclosure by an issuer of material information not generally available) for the publication of favourable research. These restrictions do not preclude the acceptance of reasonable hospitality in accordance with the Firm's general policies on entertainment, gifts and corporate hospitality.

DISCLAIMER

This publication has been prepared by Independent Investment Research (Aust) Pty Limited trading as Independent Investment Research ("IIR") (ABN 11 152 172 079), an corporate authorised representative of Australian Financial Services Licensee (AFSL no. 410381). IIR has been commissioned to prepare this independent research report (the "Report") and will receive fees for its preparation. Each company specified in the Report (the "Participants") has provided IIR with information about its current activities. While the information contained in this publication has been prepared with all reasonable care from sources that IIR believes are reliable, no responsibility or liability is accepted by IIR for any errors, omissions or misstatements however caused. In the event that updated or additional information is issued by the "Participants", subsequent to this publication, IIR is under no obligation to provide further research unless commissioned to do so. Any opinions, forecasts or recommendations reflects the judgment and assumptions of IIR as at the date of publication and may change without notice. IIR and each Participant in the Report, their officers, agents and employees exclude all liability whatsoever, in negligence or otherwise, for any loss or damage relating to this document to the full extent permitted by law. This publication is not and should not be construed as, an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. Any opinion contained in the Report is unsolicited general information only. Neither IIR nor the Participants are aware that any recipient intends to rely on this Report or of the manner in which a recipient intends to use it. In preparing our information, it is not possible to take into consideration the investment objectives, financial situation or particular needs of any individual recipient. Investors should obtain individual financial advice from their investment advisor to determine whether opinions or recommendations (if any) contained in this publication are appropriate to their investment objectives, financial situation or particular needs before acting on such opinions or recommendations. This report is intended for the residents of Australia. It is not intended for any person(s) who is resident of any other country. This document does not constitute an offer of services in jurisdictions where IIR or its affiliates do not have the necessary licenses. IIR and/or the Participant, their officers, employees or its related bodies corporate may, from time to time hold positions in any securities included in this Report and may buy or sell such securities or engage in other transactions involving such securities. IIR and the Participant, their directors and associates declare that from time to time they may hold interests in and/or earn brokerage, fees or other benefits from the securities mentioned in this publication.

IIR, its officers, employees and its related bodies corporate have not and will not receive, whether directly or indirectly, any commission, fee, benefit or advantage, whether pecuniary or otherwise in connection with making any statements and/or recommendation (if any), contained in this Report. IIR discloses that from time to time it or its officers, employees and related bodies corporate may have an interest in the securities, directly or indirectly, which are the subject of these statements and/or recommendations (if any) and may buy or sell securities in the companies mentioned in this publication; may affect transactions which may not be consistent with the statements and/or recommendations (if any) in this publication; may have directorships in the companies mentioned in this publication; and/or may perform paid services for the companies that are the subject of such statements and/or recommendations (if any).

However, under no circumstances has IIR been influenced, either directly or indirectly, in making any statements and/or recommendations (if any) contained in this Report. The information contained in this publication must be read in conjunction with the Legal Notice that can be located at <http://www.independentresearch.com.au/Public/Disclaimer.aspx>.

THIS IS A COMMISSIONED RESEARCH REPORT.

The research process includes the following protocols to ensure independence is maintained at all times:

- 1) The research process has complete editorial independence from the company and this included in the contract with the company;
- 2) Our analyst has independence from the firm's management, as in, management/ sales team cannot influence the research in any way;
- 3) Our research does not provide a recommendation, in that, we do not provide a "Buy, Sell or Hold" on any stocks. This is left to the Adviser who knows their client and the individual portfolio of the client.
- 4) Our research process for valuation is usually more conservative than what is adopted in Broking firms in general sense. Our firm has a conservative bias on assumptions provided by management as compared to Broking firms.
- 5) All research mandates are settled upfront so as to remove any influence on ultimate report conclusion;
- 6) All staff are not allowed to trade in any stock or accept stock options before, during and after (for a period of 6 weeks) the research process.

For more information regarding our services please refer to our website www.independentresearch.com.au.

Contents

Diversified Portfolio of Radiopharmaceutical Theranostics	1
Key Points	1
SWOT Analysis.....	2
Company Overview	3
Pivalate	5
Nano-mAbs	6
AVB6 Integrin	8
Radiopharmaceutical Market	9
Competitive Landscape	10
Valuation & Investment View	12
Risks	14
Board and Management	15
Appendix A - Licence Agreements	17

Company Information

Share price (\$) as at 8 December 2021	\$0.34
Valuation (\$ per share)	\$0.86
Issued capital:	
Ordinary shares (M)	253.3
Options (M)	33.1
Fully diluted (M)	286.4
Market capitalisation (\$M)	86.1
12-month Share Price Low/High (\$)	0.29/0.60

Board and Management

Paul Hopper: Chairman (Executive)
Riccardo Canevari: Managing Director & CEO
Ian Turner: Director (Non-Executive)
Dr. Michael Baker: Director (Non-Executive)

Largest Shareholders	%
Kilinwata Investments Pty Ltd	35.5%
NanomabTechnologies Limited	8.3%
CS Third Nominees Pty Limited	3.9%
HSBC Custody Nominees	2.4%
TRIMIT GMBH	1.8%
Top 20 Shareholders	69.8%

Source: RAD

DIVERSIFIED PORTFOLIO OF RADIOPHARMACEUTICAL THERANOSTICS

Radiopharm Theranostics Limited (ASX:RAD) is a newly listed company on the ASX with the Company commencing trading on 25 November 2021. The Company is focused on developing nuclear medicines to treat cancer with a diversified portfolio of radiopharmaceutical diagnostic and therapeutic (theranostic) candidates.

KEY POINTS

Diversified Portfolio of Radiopharmaceutical Theranostics: Radiopharm Theranostics Limited (ASX:RAD) has a portfolio of preclinical and clinical stage radiopharmaceutical candidates that it is seeking to develop. The Company has acquired exclusive licences to four platforms for the development and commercialisation of the candidates. The candidates are targeting a range of cancer indications. The candidates will be tested in both a diagnostic and therapeutic capacity, with the candidates first being tested as a diagnostic and then if successful the candidate will be tested for effectiveness as a therapeutic. Testing the candidates effectiveness as a diagnostic first ensures the Company is dedicating capital resources to developing the candidates that are most likely to succeed based on the trials as a diagnostic.

IPO Raises \$50m: RAD raised \$50m from the IPO through the issue of 83.3m ordinary fully paid shares at a price of \$0.60 per share. The capital raising boosted the Company's cash reserves to \$64.8m at the date of listing. The capital will be used to pay for product development, licence fees and milestone payments, as well as operating and working capital expenditure. The capital is expected to cover the Company's expenses for 24 months from listing. The Company will likely have to raise additional capital in due course to fund further development of the candidates, depending on the outcomes of the clinical trials.

Experienced Management Team: The Company is led by an experienced management team and Board. The Executive Chairman, Paul Hopper, has over 25 years' experience in biotech, healthcare and life sciences sector with a focus on bringing technologies to market. Paul has served as either Founder, Chairman, Non-Executive Director or CEO for more than 15 companies in the US, Australia and Asia and is a significant shareholder in the Company. The Managing Director (MD) and CEO, Riccardo Canevari, has extensive experience across speciality pharmaceuticals, oncology and radiopharmaceuticals. Riccardo was most recently the Chief Commercial Officer of Advanced Accelerator Applications (acquired by Novartis), a global leader in nuclear medicine. The Chairman and MD & CEO are supported by an experienced team that we view to be well placed to deliver on the development and potential commercialisation of the portfolio.

Radiopharmaceutical Market: The global radiopharmaceuticals market is sizable, estimated to be valued at US\$6.7b in 2020 and forecast to surpass US\$11.5b by 2027, according to Coherent Market Insights. There is significant interest in the market with advancing knowledge of tumour cells and their cell surface proteins and the availability of tools to target these proteins and advancements in technologies. Given the size of the oncology markets that the Company is targeting, the market potential is substantial for the Company's candidates. Although competition is high and increasing in the market.

Valuation: We have assigned RAD a value of **\$0.86 per share** (\$0.76 per share on a fully diluted basis). The valuation is based on a risk-adjusted NPV methodology and incorporates those candidates that have commenced clinical trials or clinical trials that we are confident will commence in the near-term. This includes five candidates across a range of cancer indications - four diagnostics and one therapeutic. We expect the Company to commence a number of Phase I clinical trials over the next 12 months in addition to progressing the current trials, resulting in the number of candidates in clinical trials expanding. We view there to be significant potential upside for the Company given the portfolio and potential market for the candidates if successful. We note that there are substantial risks associated with the Company given the candidates remain in the early stages of clinical development, with the use of the candidates as therapeutics in the very early stages of clinical development. There are no guarantees that the candidates will be successful, hence the reason we adjust our NPV model to reflect the probability of the candidates being successful.

SWOT ANALYSIS

STRENGTHS

- ◆ While still in the early stages of clinical development, the portfolio includes candidates that have completed Phase 1 diagnostic studies and are progressing to Phase II studies, (Pivalate and Nano-mAbs).
- ◆ The Company has a diversified portfolio using small molecules, peptides, and monoclonal antibodies.
- ◆ The clinical development for theranostics involves testing the safety and effectiveness of the diagnostic before testing a candidate's effectiveness as a therapeutic. The diagnostic testing can provide a clear indication as to which candidates will progress without having to undergo the trials as a therapeutic potentially saving both time and money.
- ◆ The Board and Management team have extensive experience in developing radiopharmaceuticals.
- ◆ There is limited competition for the treatment of glioblastoma and renal cell carcinoma using radiopharmaceuticals providing a significant competitive advantage if the candidates are successful. We note however that there are a number of other treatment types that are currently in clinical development that are seeking to provide improved treatments for these two cancer indications.
- ◆ The Company's assets are protected by their intellectual property portfolio. We note that a number of patent applications remain pending.
- ◆ Radiopharmaceuticals can play a role in high unmet need disease areas and as such can be candidates for the priority review process. Under this process, regulatory authorities grant priorities which can accelerate the development process and result in candidates getting to market in more streamlined fashion. The portfolio was acquired with the high unmet need as a criteria when screening potential assets with the potential for priority review in mind.
- ◆ The Company raised \$50m through the IPO and as such has a capital base to develop the portfolio of candidates.

WEAKNESSES

- ◆ As with all clinical stage biotech companies, an investment in RAD is speculative given the early stage nature of the portfolio of candidates.
- ◆ There are unique logistics associated with obtaining and delivering radioisotopes to the clinic for use in patients. This can result in increased costs for product development.
- ◆ Of the 253.3m shares on issue, 55% of shares are restricted from trading as a result of escrow arrangements. As such, there is a limited free float at present which may result in limited market liquidity.

OPPORTUNITIES

- ◆ The Company's technology can be further applied to various cancers, so there is an even larger potential market if the technologies are approved for use.
- ◆ Completing the first Phase 1 diagnostic trials before the therapeutic trials decreases risk. Using different cancer-specific targeting agents also reduces the risk.

THREATS

- ◆ There is an increasing level of research and development in the radiopharmaceutical field. Competitors may develop more effective, affordable, or more convenient products making RAD less competitive. In particular, Telix Pharmaceuticals is a radiopharmaceutical company also targeting glioblastoma, renal cell carcinoma, and prostate cancer.
- ◆ The company is currently not generating revenue. The Company will need to raise capital to progress the development of the portfolio of radiopharmaceuticals. Capital raisings may be dilutive to existing shareholders.
- ◆ Access to the intellectual property rights to develop and commercialise radiopharmaceuticals is predicated on the continuing operation of the Licence Agreements between RAD and the Licensors.

COMPANY OVERVIEW

Radiopharm Theranostics Limited (ASX: RAD) is a clinical stage pharmaceutical company that focuses on the development of radiopharmaceuticals, which are radioisotopes bound to molecules to diagnose and treat diseases. The Company has secured the licences to four platform technologies which it is seeking to develop for the diagnosis and treatment of a range of cancers.

RAD was incorporated in February 2021 and recently listed on the ASX, raising \$50m as part of the IPO with capital raised to be used for the payment of licence agreements and to develop the portfolio of candidates, as detailed below. The focus of the Company is to develop and commercialise its radiopharmaceutical candidates for possible licencing or distribution arrangements, or sale to a leading global pharmaceutical company.

The portfolio was secured by the Executive Chairman, Paul Hopper, with the portfolio selected based on a set of criteria such as high unmet need in oncology indications, tumour types that can be considered radiosensitive and target molecules with clear theranostic potential. The result is a portfolio of four licensed platform technologies – Pivalate, Nano-mAbs, AVB6, and PSA-mAb. The portfolio has small molecules, peptides, and monoclonal antibodies that have both diagnostic and therapeutic potential. These platforms are in both preclinical and clinical stages of development. The Company will first undergo diagnostic clinical trials to determine the safety and efficacy of the diagnostic before undertaking therapeutic clinical trials.

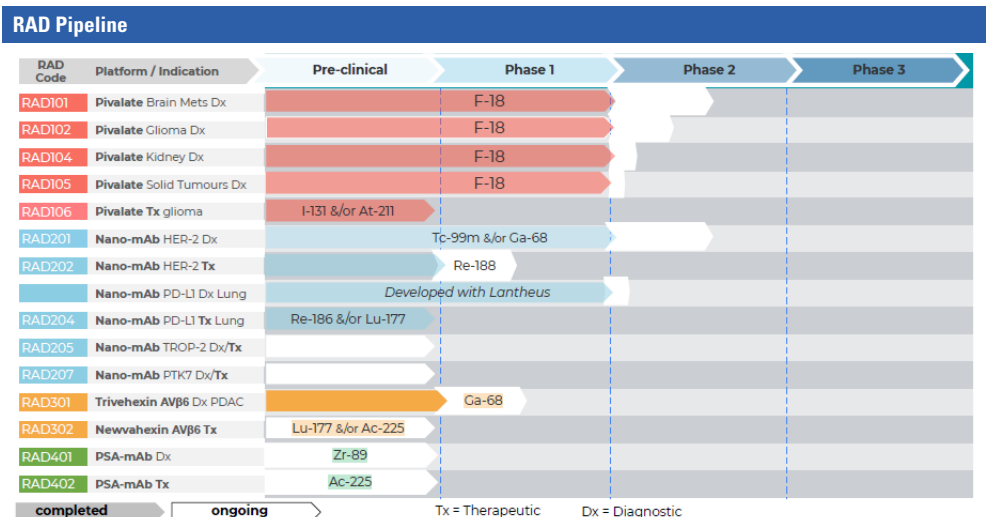
- ◆ **Pivalate** is a radiotracer based on a very stable, short chain carbohydrate. In comparison to other PET imaging, Pivalate showed superior imaging performance and was equally good for two breast cancer models. A Phase 1 diagnostic trial for glioma is complete with the Company progressing Phase 2 diagnostic studies for gliomas and cerebral metastases. Phase 2 diagnostic studies for metastatic renal cell carcinoma and solid tumor cells are also underway.
- ◆ **Nano-mAbs** are single domain antibodies labelled with radioisotopes. A Phase 1 imaging study in 45 patients is complete. Current targets are HER-2 for breast cancer, PD-L1 for non-small cell lung cancer, and TROP-2 for triple negative breast cancer, and PTK7 for multiple solid tumours. A Phase 1 therapeutic study for HER2+ breast cancer is expected to start in mid-2022 in the US.
- ◆ **AVB6 Integrin** is a selective ligand for a cell surface protein (avB6-integrin) that is labelled with radioisotopes. A Phase 1 compassionate diagnostic study is ongoing in pancreatic and head & neck cancer.
- ◆ **PSA-mAb** is a human monoclonal antibody targeting prostate specific antigen (PSA) labelled with radioisotopes. PSA-mAb is in the preclinical stage of development.

For the purposes of this report we have focused on the three platforms that have or are due to progress to clinical trials in the near-term (Pivalate, Nano-mAbs and AVB6 Integrin). The candidates using the PSA-mAb platform are still in preclinical trials. The Company has entered into licence agreements for all four platforms. Details of the agreements can be found in Appendix A.

CLINICAL DEVELOPMENT PIPELINE

RAD seeks to follow a development process over the next 24 months in line with standard development practices. In the event of successful Phase II trials the Company will consider various options as to whether to out-licence or partner for further development or whether to continue with the clinical development to Phase III trials. Phase III trials are large in size and will require a significant capital injection.

Across the portfolio of candidates, the clinical trials will be required to show that the ligands, which incorporate a bound radioisotope, are specific in localising to the target tumour with minimal or no binding to other tissue, resulting in clearly delineated tumorous growth for the purpose of diagnosis, and destruction of the lesion when used as a therapeutic agent.



Source: Radiopharm Theranostics Limited Investor Presentation, October 2021.

INTELLECTUAL PROPERTY

The Company's assets are protected by patents in the major territories in which RAD hopes to conduct its business activities. The below table provides a summary of the Intellectual Property (IP) portfolio. There have been a number of patent applications across a number of jurisdictions. Some patents have been granted while some remain pending. The patent expiry dates range from 2034 to 2041 providing the Company with significant protection.

Intellectual Property Portfolio Summary

RAD Nano-mAbs:- PD-L1, HER-2, TROP-2, PTK7

PCT/CN2017/077122(PD-L1)	PD-L1 Status: Int. Publication 2017; Granted US; pending US, Europe & China	Expiry: 2036 (China) 2037 (US, Europe)
CN201610158493.0(PD-L1)		
PCT/CN2018/091953(HER-2)	HER-2 Status: Int. publication 2018; pending China, Europe, Japan, & US	Expiry: 2038
CN202110750848.6(TROP-2)	TROP-2 Status: filed July 2021 in China	Expiry: 2041 (earliest)
CN202110950740.1(PTK7)	PTK Status: filed August 2021 in China	Expiry: 2041 (earliest)

RAD AVβ6 Integrin

EP20162699.1	Status: Pending Europe, PCT filed	Expiry: 2040 (Europe) 2041 (PCT)
PCT/EP2021/056424		

RAD Pivalate

EP2994169	Status: Granted Europe	Expiry: 2034
US10,821,194	Status: Granted US	Expiry: 2034
US10,213,516	Status: Granted US	Expiry: 2035

RAD PSA-mAB

PCT/EP2016/073684 PSA	Status: Int. Publication 2017; Granted Europe & Japan; pending various	Expiry: 2036
PCT/US2012/061982 PSA mAB	Status: Int. Publication 2013; Granted Australia, China, Europe & Japan; pending Canada and US	Expiry: 2032

Source: Radiopharm Theranostics Limited Investor Presentation, September 2021/IIR

CAPITAL STRUCTURE & USE OF FUNDS

The Company commenced trading on the ASX on 25 November 2021. The Company raised \$50m through the issue of 83.3m shares at \$0.60 for the IPO offer. Post completion of the IPO, the Company has 253.3m shares on issue and 33.1m options. The capital raised takes the Company's cash reserves to \$64.8m. The Company has no debt.

Capital Structure as at 29 November 2021

Ordinary shares on issue	116,666,984
Ordinary Fully Paid Restricted	136,666,573
Total Shares on Issue	253,333,557

Options:	
Expiring 25 November 2024 - Restricted	13,680,012
Expiring 25 November 2025 - Restricted	5,700,006
Expiring 25 November 2026 - Exercise Price \$0.60	5,066,672
Expiring 25 November 2026 - Restricted	8,666,678
Fully Diluted	281,446,925

Source: Radiopharm Theranostics Limited Prospectus

The below outlines the use of capital post the completion of the IPO. The Company anticipates this is how the capital will be deployed over the next 2 years. We note that the total capital includes an estimated \$8.9m in cash rebates from R&D expenditure. Further detail regarding the licence fees and milestone payments can be found in Appendix A which details the licence agreements the Company has entered into.

Uses of Fund	AUD\$m
IPO Offer Costs	4.0
Licence Fees	27.8
Admin/corporate and general working capital	3.6
Employment	11.1
Sponsored research agreements	5.3
Milestones	6.2
Phase I clinical trials and manufacturing	10.7
Total	68.8

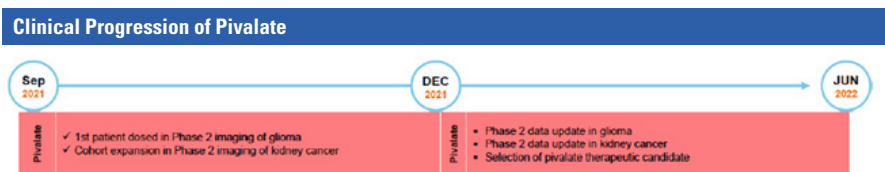
Source: Radiopharm Theranostics Limited Prospectus

PIVALATE

Radiopharm entered into a licence agreement for ^{18}F -FPIA Imaging Agent with Cancer Research Technology (CRT) Limited on 3 October 2021.

Pivalate (^{18}F -fluoropivalate (^{18}F -FPIA)) is a radiotracer that is based on a metabolically stable short chain carbohydrate. Fatty acids have a long hydrocarbon chain on one end and a carboxylate group on the other end. Examples of short chain carboxylates are acetate and pivalate. Fatty acids are taken up by tumours and broken down. For example, acetate contributes half of the oxidative activity for malignant glioma. Short chain carboxylates such as acetate and the non-natural substrate pivalate use the beta-oxidation pathway (pathway that breaks down fatty acids).

In contrast to acetate that is oxidized to carbon dioxide, pivalate is esterified to pivaloylcarbinine. The resulting ester is eliminated in urine.



CLINICAL DEVELOPMENT

Pivalate is one of the most advanced candidates in the portfolio with the diagnostics imaging agent completing Phase I trials and moving into Phase II trials.

The results from the Phase 1 diagnostic clinical trial were published in February 2020. The clinical trial was focused on ^{18}F -fluoropivalate as a tracer on healthy fed and fasting or fasted patients. Based on the results of the clinical study, the Company is looking to commence a UC Phase 1 therapeutic clinical trial along with Phase 2 diagnostic clinical trials for renal cell carcinoma, solid tumours, and glioblastoma.

The Phase 1 study was undertaken on participants and showed encouraging results. ^{18}F -FDG is the standard marker for glucose uptake. Its uptake in normal brain tissue limits its use for diagnosis and treatment of gliomas. It is also limited in its use for renal cell carcinoma as its physiological excretion from kidneys decreases contrast between renal lesions and normal tissue. In comparison, Pivalate shows a low-level uptake within the healthy brain that gives it potential to diagnose and treat gliomas. Also, Pivalate's delayed urinary excretion patterns give it the potential to diagnose and treat renal cell carcinoma. Whether patients fed or

fasted, it did not change the biodistribution, with an exception to the liver. All 24 participants enrolled in the study with had no adverse events.

The Company is seeking to progress to Phase II trials targeting a number of indications. The Phase II studies include:

- ◆ An expansion of a Phase II diagnostic study targeting patients with glioma. The study will measure the ^{18}F -FPIA uptake in gliomas in 20 patients. A single dose of ^{18}F -FPIA (maximum, 370 MBq) IV will be administered to the participant followed by a whole brain dynamic PET/MRI scan.
- ◆ A Phase II diagnostic study targeting patients with metastatic renal cell carcinoma. The study is ongoing and measuring the ^{18}F -FPIA uptake in metastatic renal cell carcinoma of 24 patients. Patients will have three imaging visits at baseline, 4-6 weeks and 12 weeks post the commencement of conventional treatment. For each scan, a single dose of ^{18}F -FPIA (maximum, 370 MBq) IV will be administered to the participant followed by a whole brain dynamic PET/MRI scan. The study will look at longitudinal changes in ^{18}F -FPIA uptake at baseline, at 4-6 weeks and at 12 weeks following treatment.
- ◆ A Phase II diagnostic study targeting solid tumours. The study will measure the relationship between ^{18}F -FPIA uptake and percent positive tumour cells reported as counts defined per area from whole section immunohistochemistry for Phosphohistone H3 (PHH3). The study is using a PET/CT scan to look at which cancer type use fatty acids for energy and if it can be measured. Participants will undergo two PET/CT scans with the ^{18}F -FPIA tracer on two separate visits.
- ◆ A Phase II trial targeting patients with cerebral metastases. The study is ongoing and will measure ^{18}F -FPIA uptake within cerebral metastases in 12 patients who are treatment naïve and 12 patients who have completed Stereotactic Radiosurgery +/- combined chemotherapy. The goal of the study is to quantify the degree of early step fatty acid oxidation in cerebral metastases as imaged by ^{18}F -FPIA PET/MRI. The trial is expected to finish by mid-2022. It compares the FPIA uptake in metastases that are treatment naïve compared to those that have undergone treatment. A single dose of ^{18}F -FPIA (maximum, 370 MBq) IV will be administered to the participant followed by a whole brain dynamic PET/MRI scan.

NANO-MABS

Nano-mAbs is the Company's most progressed product going into a therapeutic study for HER2+ breast cancer.

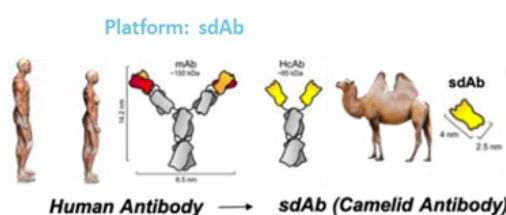
Clinical Progression of Nano-mAbs



Nano-mAbs is a $^{99\text{m}}\text{Tc}$ -labelled anti-HER2 single-domain antibody that is a molecular imaging tracer. Single-domain antibodies (sdAbs) are small antigen-binding fragments derived from heavy-chain-only antibodies. Heavy-chain-only antibodies are antibodies that lack light chains and are produced by camelids (including camels and llamas).

In comparison to conventional antibodies, sdAbs have a relatively small molecular weight, low complexity, and can be labelled with shorter-lived radionuclides. These molecules have a faster blood clearance rate, can deeply penetrate tumours, have a strong affinity and specificity for antigens.

Platform: sdAb



Source: Radiopharm Theranostics Limited Investor Presentation, September 2021

CLINICAL DEVELOPMENT FOR HER2 POSITIVE BREAST CANCER

A Phase 1 clinical trial has been completed with data published in July 2021. The clinical trial was focused on patients with HER2 positive breast cancer and enrolled 45 participants. After meeting the endpoints from a Phase 1 diagnostic study, the Company is planning for a Phase 1 therapeutic study, which is expected to be started by mid-2022.

Phase 1 Diagnostic Study

The Phase 1 study evaluated ^{99m}Tc -labelled anti-HER2 single-domain antibody in 10 patients with breast cancer. Patient were injected with microdose (<100ug) of ^{99m}Tc -NM-02 radiotracer. HER2 positivity was identified using SPEC/CT imaging. Nine out of ten patients had tracer uptake in their primary tumours. In some of the observations the tracer uptake was observed in both primary tumours and metastases. The one patient that did not show an uptake was HER2-negative and therefore this result would be expected.

The table below shows nine patients with varying degrees of tracer uptake on their primary tumours. Immunohistochemistry (IHC) and fluorescence in situ hybridization (FISH) are the gold standard to determine the level of HER2. The five HER2 IHC positive patients (highlighted) had obvious tumour uptake on the primary tumours. The HER2-negative patient BR007 was the only patient with no distinct uptake in the tumour.

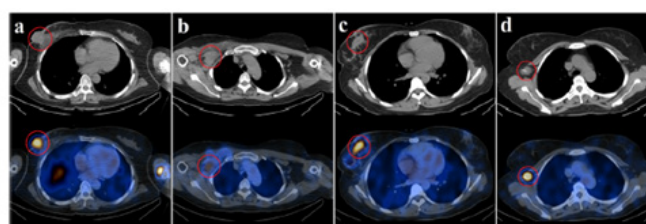
Imaging Characteristics

patient no.	HER2 IHC	visual interpretation				SUV _{max} of tumor lesions			
		primary		metastatic		primary		metastatic	
		1 h	2 h	1 h	2 h	1 h	2 h	1 h	2 h
BR001	3+	+	+			2.41	4.70	0.64	0.35
BR002	0	-/+	-/+			0.66/3.16	0.92/2.71	0.71	0.44
BR003	0	+/+	+/+	+/+	+/+	4.06/3.97	5.80/3.33	4.42/2.24	3.81/2.83
BR004	0	+	+		NA	3.29	4.25		NA
BR005	0	+	+		NA	1.92	1.81		NA
BR006	3+	+	+	+/+	+/+	8.92	11.18	5.00/6.20	5.83/8.55
BR007	0				NA	0.76	1.34		NA
BR008	2+		+	+	+	1.36	1.76	1.80	2.87
BR009	2+	+	+	+	+	6.95	8.17	3.59	4.72
BR010	3+	+	+	+	+	6.21	7.89	8.18	10.70

*NA = not applicable.

Below are the CT and SPECT/CT images (CT images on top and SPECT/CT images on the bottom). Images were shown for patient BR006 (HER2 IHC 3+) in images a and b and patient BR010 (HER2 IHC 3+) in images c and d. Both patients had clear tracer accumulation in primary tumours, but different uptake level in their metastases. This demonstrates that ^{99m}Tc -NM-02 has satisfying imaging characteristics.

CT and SPECT/CT Images



Phase 1 Therapeutic Study

The Phase 1 therapeutic study will target the SPECT/CT imaging of HER2 expression and radionuclide therapy. ^{99m}Tc -NM-02 is used as a diagnostic agent for SPECT/CT imaging of HER2 expression, and ^{188}Re -NM-02 is used as a therapeutic drug for radionuclide therapy of HER2-positive Breast Cancer. The study will be performed in 11 patients with HER2+ metastatic breast cancer, with dose escalation, to determine and validate the right dose to be utilize in the subsequent Phase II trial.

CLINICAL DEVELOPMENT FOR NON-SMALL CELL LUNG CANCER

A Phase 1 diagnostic clinical trial was completed in 2019. The clinical trial was focused on patients with non-small cell lung cancer. After meeting the endpoints from a Phase 1 diagnostic study, the Company is seeking to commence a Phase 1 therapeutic clinical trial. This trial is expected to commence in the next 12 months.

The Phase I study involved providing sixteen patients with non-small cell lung cancer with a single-domain antibody NM-01, against PD-L1, radiolabeled with ^{99}Tc for SPECT imaging. Two-hour primary tumour-to-blood-pool ratios (T:BP) correlated with PD-L1 immunohistochemistry results (gold standard). Nodal and bone metastases also showed tracer uptake. There were no drug-related adverse events.

The table below shows that the T:BP ratio was greater at 2 hours. There was a SPECT T:BP ratio of 1.79 at 1 hour and 2.22 at 2 hours with a $P = 0.005$. Primary tumour T:BP ratios at 2 hours correlated with PD-L1 immunohistochemistry results. The results are promising showing that company can show results that correlate with the gold standard of diagnostics for non-small cell lung cancer.

Imaging Characteristics

Patient no.	sdAb dose group	Injected activity (MBq)	SPECT T:L ratio 1 h	SPECT T:L ratio 2 h	SPECT T:BP ratio 1 h	SPECT T:BP ratio 2 h	SPECT highest lymph node T:BP ratio 1 h	SPECT highest lymph node T:BP ratio 2 h
1	1	339	1.92	2.17	1.31	1.24	1.84	1.64
2	1	374	2.82	2.99	2.03	3.09	1.99	3.40
3	1	375	2.16	2.80	1.25	1.65	1.31	1.73
4	2	656	1.19	1.44	1.24	1.66	1.43	1.73
5	2	685	0.93	1.10	2.23	2.65	1.65	1.95
6	2	635	2.71	1.88	1.75	1.79	2.22	3.24
7	1	255	1.80	2.06	1.31	1.76	NP	NP
8	1	398	2.48	2.41	1.83	2.26	NP	NP
9	1	486	1.42	2.07	1.95	2.00	2.1	1.9
10	1	381	3.15	5.63	2.13	3.12	1.47	1.75
11	1	317	1.92	1.74	1.73	2.37	1.39	2.26
12	1	448	4.17	6.50	2.20	3.53	3.05	3.13
13	1	400	2.4	3.09	1.61	2.46	NP	NP
14	1	409	1.49	1.54	1.68	1.98	1.75	1.34
15	1	289	1.69	1.47	2.16	1.55	1.9	1.77
16	1	363	3.35	4.15	2.3	2.47	2.23	2.09
Mean			2.22	2.69	1.79	2.22	1.83	2.02
Median			2.04	2.12*	1.79	2.13†	1.84	1.77‡

* $P = 0.034$ between 1 and 2 h.

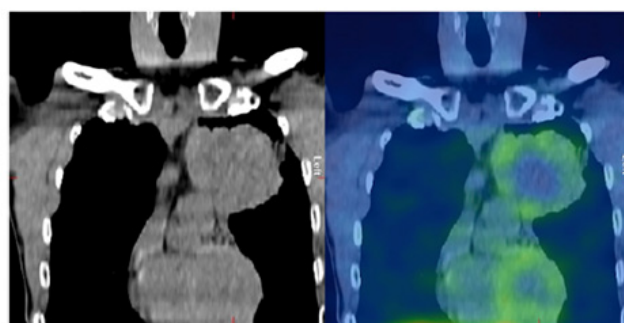
† $P = 0.005$ between 1 and 2 h.

‡ $P =$ not significant.

NP = not present.

The image below shows a left upper lobe tumour showing PD-L1 expression. The T:BP = 2.46.

Imaging



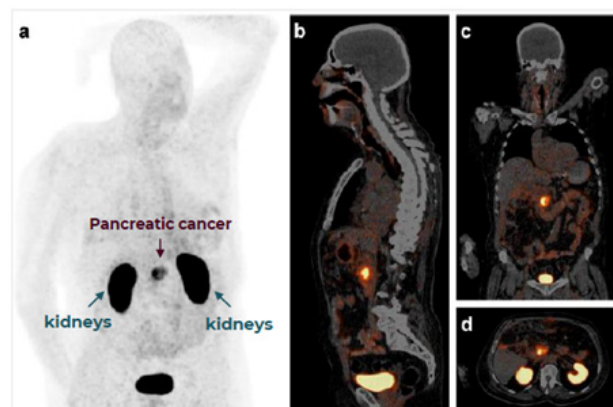
AVB6 INTEGRIN

Trivehexin (AVB6 Integrin) is a selective ligand for a cell surface protein (avB6-integrin). avB6-integrin is over expressed in cancers such as pancreatic ductal adenocarcinoma, gastric, colon, ovarian, cervical, head-and-neck, and lung cancers (specifically non-small cell lung cancer). Trivehexin is a molecule developed for the application of imaging and diagnosis. It is labelled as ^{68}Ga -trivehexin.

The image below shows a ^{68}Ga -trivehexin scan of a patient with a confirmed diagnosis of pancreatic ductal adenocarcinoma in the pancreatic head. The only other prominent areas are in the kidney and urinary bladder due to rapid excretion.

The Company is seeking to commence a Phase 1 Trivehexin diagnostic clinical trial in the next 12 months. In order for them to progress to a Phase 1 Trivehexin therapeutic clinical trial, they would have to show: 1) tracer uptake in the primary tumours that are consistent with immunohistochemistry results; and 2) no drug-related adverse events.

PET/CT Imaging of Pancreatic Carcinoma



RADIOPHARMACEUTICAL MARKET

In 2020, the World Health Organisation's International Agency on Cancer ("IARC") estimates there were 19.3 million cancer cases diagnosed globally. One analysis estimated that the global oncology drug market was valued at US\$97.4 billion in 2017. The total amount of spending on cancer drugs in the US in 2015 was US\$32 billion. In 2017, the price tag of all cancer drug launches had a median of US\$150,000¹.

The global radiopharmaceuticals market is sizable, estimated to be valued at US\$6.7b in 2020 and forecast to surpass US\$11.5b by 2027, according to Coherent Market Insights.

Radiotherapeutics companies have had a history of success. In January 2018, Lutathera (owned by Novartis) received FDA approval for the treatment of somatostatin receptor (SSTR) positive gastroenteropancreatic neuroendocrine tumours. In 2020, Lutathera reported sales of \$445 million. It has been given to over 9,000 gastroenteropancreatic neuroendocrine tumours (GEP-NETs) patients that are positive for the hormone receptor SSTR across Europe and U.S.

In 2019, Bracco Imaging S.p.A. acquired all outstanding shares of Blue Earth Diagnostics for \$450 million plus closing adjustments. In 2016, Blue Earth Diagnostics received FDA approval for Axumin® (fluciclovine F 18). Axumin is the first FDA-approved F 18 product for positron emission tomography (PET) in men with suspected prostate cancer recurrence based on elevated blood prostate specific antigen (PSA) levels following prior treatment.

The below table details the theranostics that have been approved by the FDA.

FDA Approved Theranostics

Company	Drug	Radiopharmaceutical	Private/ Public	Treatment	Sales in 2020 (USD)
Lantheus Medical Imaging	Azedra	Iodine-131 iobenguane	Nasdaq: LNTN	Iobenguane scan positive, unresectable, locally advanced metastatic pheochromocytoma or paraganglioma	\$58.9 million
GlaxoSmithKline discontinued	Bexaar	Tositumomab and iodine I 131 tositumomab	NYSE: GSK	Treatment with CD20-positive relapsed or refractory, low grade, follicular or transformed non-Hodgkin's lymphoma	Unknown
Advanced Accelerator Applications (a subsidiary of Novartis)	Lutathera	Lutetium Lu-177 dotatate	NYSE: NVS	Treatment of somatostatin receptor-positive gastroenteropancreatic neuroendocrine tumours	\$445 million

1. Radiopharm Theranostics Limited Prospectus..

Bayer HealthCare Pharmaceuticals	Xofigo	Radium-223 dichloride	OTCMKTS: BAYRY	Treatment of patients with castration-resistant prostate cancer, symptomatic bone metastases	\$295 million
Acrotech Biopharma	Zevalin	Yttrium-90 ibritumomab tiuxetan	Private	Treatment of relapsed or refractory, low-grade or follicular B-cell non-Hodgkin's lymphoma. Treatment of previously untreated follicular NHL in patients who achieve a partial or complete response to first-line chemotherapy	Unknown
Jubliant Radiopharma	Draximage: Diagnostics	Sodium iodide I 131	Private	Ddx: Performance of radioactive iodide uptake test to evaluate thyroid function. Localizing metastases associated with thyroid malignancies	Unknown
International Isotopes	Treatment	Sodium iodide I 131	OTCQB: INIS	Therapeutic: Treatment of hyperthyroidism, carcinoma of the thyroid	\$4 million
Lantheus Medical Imaging	Quadramet	Samarium-153 lexidronam	Nasdaq: LNTN	Pain relief of patients with confirmed osteoblastic metastatic bone lesions that enhance on radionuclide bone scan	\$58.9 million
QBioMed	Metastron	Strontium-89 chloride	OTC:QBIO	Relief of bone pain in patients with painful skeletal metastases	\$30,000

Source: Radiopharm Theranostics Limited Prospectus, Company websites.

Given the size of the oncology market and the cancer indications that the Company is targeting, the potential market for RAD's portfolio of candidates is significant, particularly from a therapeutic perspective.

Reflecting the improvements in technologies in radiopharmaceuticals and market potential for these products, there has been a number of significant acquisitions. One of the biggest acquisitions was Novartis's acquisition of Advanced Accelerator Applications, which it acquired for US\$3.9b. We note the acquisition was made prior to the Company receiving FDA approval of its lead candidate Lutathera.

Recent Key Acquisitions

Date	Companies Involved	Clinical Development Stage	Acquisition Value
January 2018	Advanced Accelerator Applications/Novartis	Approved	US\$3.9b
December 2018	Endocyte/Novartis	Phase III	US\$2.1b
June 2019	Blue Earth Diagnostics/Bracco	Approved	US\$450m+
March 2021	Research Alliance Corp/Point Biopharma	Phase III	US\$300m

Source: Radiopharm Theranostics Limited Investor Presentation, September 2021.

COMPETITIVE LANDSCAPE

The radiopharmaceutical market is competitive with a number of players in the market and competition is growing. There are four other radiopharmaceutical focused companies listed on the ASX, two of which are equipment providers and two of which are biotech companies developing candidates. There are a further 11 globally listed companies. This is in addition to a number of private companies seeking to advance their technology. The below table details the listed theranostic companies.

There are two companies currently with FDA approved products and one company with European market approval. Cyclopharm Limited's (ASX:CYC) Technegas diagnostic is approved and sold in over 60 countries however did not gain FDA approval in June 2021.

Publicly Listed Theranostic Companies					
Company	Ticker	Main candidate	Cancer Indication	Clinical Development	Market Cap (\$)*
Actinium Pharmaceuticals	NYSE: ATNM	Iomab-B	Leukemia and lymphoma cancer cells, B cells and stem cells	Phase 3	151.85m
Alseres Pharmaceuticals	OTC: ALSE	Altropane®	Diagnose Parkinson's disease and dementia	Phase 3	398,255
Collectar Biosciences, Inc	Nasdaq: CLRB	CLR131	Hematologic malignancies therapy	Phase 2	41.63m
Clarity Pharmaceuticals	ASX: CU6	⁶⁴ SAR-bisPSMA/ ⁶⁷ SAR-bisPSMA	Prostate cancer therapy	Phase I/IIa	136.50m
Clovis Oncology	Nasdaq: CLVS	Rucaparib	Ovarian and prostate cancer treatment	Phase 3	373.35m
Cyclopharm Ltd	ASX: CYC	Technegas	Ventilation Imaging	Sales to over 60 countries around the world including Australia, Canada. Not FDA approved.	156.87m
Fusion Pharmaceuticals	Nasdaq: FUSN	FPI-1434	IGF-1R (cancer biomarker) therapy	Phase 1	231.68m
Nanobiotix	Nasdaq: NBTX	Hensify	Soft tissue sarcoma treatment	European market approval (CE mark)	246.83m
Navidea Biopharmaceuticals	NYSE: NAVB	Lymphoseek	Sentinel lymph node biopsy agent for use in head and neck cancer patients with oral cavity carcinoma	FDA approved	34.04m
Novartis/Advanced Accelerator Applications	NYSE: NVS	Lutathera	Gastroenteropancreatic Neuroendocrine Tumors	FDA approved	180.48b
Oncosil Medical Ltd	ASX: OSL	OncoSil	Unresectable Locally Advanced Pancreatic Carcinoma	na	31.69m
QSAM Biosciences	OTCMKTS: QSAM	CycloSam	Osteosarcoma	Phase 1	7.55m
Telix Pharmaceuticals	ASX: TLX	TLX591	Prostate cancer therapy	Phase 3	2.04b

Source: Radiopharm Theranostics Limited Prospectus/Company websites/Iress.

*As at 8 December 2021.

As mentioned above there are two other clinical stage radiopharmaceutical focused biotech companies listed on the ASX: (1) Clarity Pharmaceuticals Ltd (ASX:CU6); and (2) Telix Pharmaceuticals Limited (ASX:TLX). The below graphic provides an overview of the portfolio of candidates for each of the three companies.

There is a level of overlap in the indications that the companies are seeking to treat with their candidates. For example, both RAD's and TLX's pipelines includes both diagnostic and therapeutic treatments for prostate cancer, clear cell renal cell carcinoma, and glioblastoma. While there is some overlap there is also significant differences in the portfolios. RAD is also seeking to address unique areas such as lung cancer, HER2+ breast cancer, pancreatic cancer and head and neck cancer.

TLX's portfolio is the most advanced of the three companies with TLX transitioning to commercialisation of two of its candidates: (1) Illuccix - an investigational diagnostic imaging agent for prostate cancer for which the company has received TGA approval; and (2) TLX250 - renal cancer imaging. The Company is commencing a Phase III trial for TLX591, a PSMA targeted prostate cancer therapy. In 2020, TLX entered into a strategic licence and commercial partnership with China Grand Pharma for the China market valued at \$400m. As part of the agreement, China Grand Pharma made a strategic equity investment of \$35m in TLX.

ASX-Listed Peers Portfolio Comparison

	Company	Asset	Pre-clinical	Phase 1	Phase 1/2a	Phase 2	Phase 3	Commercial
MKT CAP A\$152m	RAD RADIOPHARM THERANOSTICS	HER-2 Nano-mAb breast				x		
		TROP-2 Nano-mAb solid tumors	x					
		PKT7 Nano-mAb solid tumors	x					
		PD-L1 Nano-mAb Dx (owned by Lantheus)				x		
		AVβ6 Integrin, pancreatic, head&neck (comp. use)		x				
		FR - kidney				x		
		FR - solid tumours				x		
		FR - glioma				x		
		PSA-mAb Dx	x					
		HER-2 Nano-mAb breast Tx (comp. use)		x				
MKT CAP A\$340m	CLARITY RADIOPHARM THERANOSTICS	PD-L1 Nano-mAb NSCLC	x					
		AVβ6 Integrin Tx	x					
		Pivalate Tx	x					
		PSA-mAb Tx	x					
		Neuroendocrine Tumors (NETs)			x			
MKT CAP A\$1.7B	TELEX RADIOPHARM THERANOSTICS	Prostate		x				
		Breast/ Prostate		x				
		Neuroblastoma		x				
		Meningioma			x			
		Prostate		x				
		Pan Cancer (Breast/ Prostate)	x					
		Renal				x	recruiting	
		Prostate - lutetium				x	IND	
		Glioblastoma (GBM)		x				
		Bone marrow conditioning / rare diseases						x
MKT CAP A\$1.7B	TELEX RADIOPHARM THERANOSTICS	Renal				x		
		Prostate				x	pending	
		Glioblastoma (GBM) recurrent		x				
		Bone marrow conditioning/ rare diseases		x				

Source: Radiopharm Theranostics Limited Investor Presentation, September 2021

VALUATION & INVESTMENT VIEW

We have assigned RAD a value of **\$0.86 per share** (\$0.76 per share on a fully diluted basis). The valuation is based on a risk-adjusted NPV methodology and incorporates those candidates that have commenced clinical trials or are confident will commence in the near-term. This currently includes five candidates across a range of cancer indications - four diagnostics and one therapeutic. We expect the Company to commence a number of Phase I clinical trials over the next 12 months in addition to progressing the current trials that will see the number of candidates in clinical trials expand.

Given the patent portfolio we have modelled sales across both Europe and the US and applied a market penetration rate of 20% across all candidates. While there will be some value in the diagnostics, the significant value is expected to be generated from the therapeutics in the event the therapeutics are successful in being commercialised.

The probability of approval is based on the cumulative probability of oncology candidates, with the probability of success increasing significantly for those that progress beyond Phase II trials. The progression of candidates and the cancer indications targeted will be dependent on the results from the trials.

We have made a number of assumptions in the model regarding timing and costs based on industry standards. In the event of delays or costs are above those forecast, this will likely have an adverse impact on the valuation.

We have applied a discount rate of 11.5% which comprises a risk-free rate of 1.87% (the Australian 10-year government bond yield at the time of the valuation was done), a beta of 1.6 and a market risk premium of 6.0%. We note that any change to these inputs may result in a change to the valuation outcome.

RAD Valuation Summary						
Candidate	Indication	Status	Peak Sales (US\$)	Price per Treatment (US\$)	Launch Date	Probability of Approval
Pivalate Diagnostic	Kidney Cancer	Phase 2	560.6	\$14,654	2027	9.9%
Pivalate Diagnostic	Glioblastoma	Phase 2	126.0	\$14,654	2029	9.9%
Nano-mAbs Diagnostic	Her2+ Breast Cancer	Phase 2	395.5	\$14,654	2028	9.9%
Nano-mAbs Diagnostic	Non-small cell lung cancer	Phase 2	1,384.5	\$14,654	2028	9.9%
Nano-mAbs Therapeutic	Her2+ Breast Cancer	Phase 1	5,398.5	\$200,000	2029	5.1%
NPV (\$m)		153.8				
Debt (\$m)		0.0				

Cash (\$m)	64.8
Total Value (\$m)	218.6
Share on issue (m)	253.3
Options (m)	33.1
Fully Diluted shares on issue (m)	286.4
Value per share (basic)	\$0.86
Value per share (fully diluted)	\$0.76

FINANCIALS SUMMARY

The Company is not expected to generate any revenue in the near-term with the Company's candidates in the early stages of clinical development. The capital raised from the IPO will likely provide the Company with sufficient capital for the next 18-to-24 months, however, in the event the Company seeks to continue to develop the candidates, additional capital will have to be raised with R&D expenses increasing as the candidates progress through the trials. The amount required to be raised will be dependent on the outcome of the current trials and future trials as well as any additional licence acquisitions.

We have assumed the Company will receive a tax rebate on the R&D activities undertaken. At present companies are eligible for a cash rebate of 43.5% of R&D spend.

Profit & Loss					
AUD\$m	FY21A	FY22F	FY23F	FY24F	FY25F
Revenue	0.0	0	0	0	0
COGS	0.0	0	0	0	0
Gross Profit	0.0	0	0	0	0
Operating Expenses:					
R&D	0.0	(7.5)	(11.2)	(17.6)	(44.0)
General & Administrative Costs	(0.1)	(5.7)	(5.7)	(5.9)	(6.0)
Share based payments	(0.4)	0.0	0.0	0.0	0.0
Milestone Payments	0.0	(6.2)	(4.1)	(2.0)	(3.7)
EBIT	(0.5)	(19.4)	(21.1)	(25.5)	(53.7)
Net Finance costs	0.0	0	0	0	0
Tax	0.0	0	3.3	4.9	7.7
Profit After Tax	(0.5)	(19.4)	(17.8)	(20.6)	(46.0)

INVESTMENT VIEW

The Company has a diverse portfolio of radiopharmaceutical candidates. The Company will progress with clinical trials as a diagnostic for each of the candidates for numerous cancer indications to determine the safety and efficacy of the candidate as a diagnostic before moving to therapeutic trials. As mentioned in the report above, the Company is progressing to the Phase I therapeutic trials for some of the candidates given the results from the Phase I diagnostic clinical trials. While there is value in the candidates use as diagnostics, the substantial value for the Company will be in the therapeutics.

In addition to the clinical trials currently being undertaken by the Company, there are a number of other Phase I trials that the Company intends to commence over the next 12 months. As detailed in the Prospectus, the Company intends to file for a IMPD submission for the Nano-mAb PD-L1 for the treatment of non-small cell lung cancer therapeutic in 2H'FY22. This would be the second candidate to enter trials as a therapeutic and given 85% of lung cancers are non-small cell, the potential market is substantial.

We view there to be significant potential upside value for RAD given the number of candidates and the potential market that exists for the candidates if the trials are successful, particularly from a therapeutic use perspective.

RISKS

- ◆ **Clinical Development Risk:** Clinical trials entail significant risk with treatments. There is a risk that the products in clinical trials, particularly for therapeutic versus diagnostic, will not provide a favourable outcome and will not progress. We note that there is less risk for the therapeutic clinical trials if the clinical trials for the diagnostic component come out positive. There may also be a delay in achieving critical milestones. Any material delays impact adversely upon the Company.
- ◆ **Regulatory Risk:** The product is subject to regulation by government authorities in Australia and overseas. Pharmaceutical companies are heavily reliant on government authorities to determine whether a drug can progress through clinical trials and ultimately progress to market.
- ◆ **Competition Risk:** There has been an increase in the number of radiopharmaceutical companies seeking to develop theranostics. As such, there is increasing competition with regards to acquiring technologies and developing therapies.
- ◆ **Capital Risk:** After the funds raised from the IPO have been depleted, the Company is likely to need to raise additional capital. If the Company is unable to raise sufficient capital, the Company may need to delay or scale down its operations.
- ◆ **Capital Structure Risk:** Following the IPO, the Directors and management team will retain a significant holding in RAD. The collective interest may also have an impact on the liquidity as well as acting as a potential deterrent to corporate transactions.
- ◆ **Foreign Exchange Risk:** The company is exposed to foreign currency risk given that clinical trials are done overseas. Movements in currencies may impact the Australian dollar cost and ultimately revenue if candidates are commercialised.
- ◆ **Licence Agreements Risk:** Intellectual Property rights is predicated on the continuing operation of the Licence Agreements. RAD is reliant on each of the Licensors to have in place the relevant protection and rights to the technology and the authority to enter into the relevant Licence Agreements. A failure of the Licensor, Head Licensor or RAD to comply with the terms of the Licence Agreements or Head Licences could have material adverse effects.
- ◆ **Intellectual Property Risk:** Some of the Company's patent applications are still pending with no guarantee that lodged patent applications will result in granted patents. If the patents are not granted to RAD, the value of the Company's IP rights may be significantly diminished and any information contained in patent applications will become part of the public domain.
- ◆ **Key Personnel Dependence & Growth Risk:** RAD's primary asset is the talent and experience of its personnel. If they leave, it may be difficult to replace them. If they leave to work for a competitor, it may adversely impact the Company. The ability to hire and retained skilled personnel may be a significant obstacle to growth.
- ◆ **Third-party Collaborators Arrangement Risk:** RAD may pursue collaborative agreements with pharmaceutical and life science companies, academic institutions, or other partners to complete the development and commercialization of its products. If RAD is not able to find a collaborative partner, it would place significant demands on the Company's resources and delay commercialisation of the technology.
- ◆ **Escrow Arrangement Risks:** Founders, members of the management team and board members of the Company will be subject to escrow requirements. At the end of each escrow period, shares will be released from escrow at the same time, which may impact the Company's share price if relevant persons seek to trade their shares at that time.

BOARD AND MANAGEMENT

Riccardo Canevari – Managing Director/CEO: Mr. Canevari was most recently Chief Commercial Officer of Novartis company Advanced Accelerator Applications, one of the leading radiopharmaceutical and nuclear medicine companies globally. He was responsible for global commercial strategy and company organizations in ~20 countries across North America, Europe, and Asia. He was lead for Lutathera in-market growth strategy and execution to build a blockbuster asset and lead on the prelaunch plan for Lu-PSMA 617 in metastatic prostate cancer. Prior to this he was Senior VP and Global Head, Breast Cancer Franchise for Novartis Oncology from 2017, overseeing the launch of major breast cancer products including KISQALI and PIQRAY. He has held various management roles with Novartis Pharma and Ethicon/Johnson & Johnson.

David Mozley – Chief Medical Officer: Prof. Mozley was most recently at Cornell University where he was Prof of Nuclear Medicine, Medical Director of the imaging research centre, and Director of the Multi-Center Clinical Translational Science Center. He was an active member of the ethics board and a past chair of the Cornell ethics board for cancer research. He has participated in over 60 clinical trials at Eli Lilly and over 100 trials at Merck in novel radio-pharmaceutical or drug development. He was the principal investigator of 11 first-in-human studies of novel radiopharmaceuticals at the University of Pennsylvania, and the sponsor of nine investigational radiopharmaceuticals at Cornell. Previously he was at Endocyte as Vice President of Imaging. He has co-authored more than 100 peer-reviewed publications.

Thom Tulip – Chief Technical Officer: Dr. Thom has spent more than 25 years in the development and commercialization of radiopharmaceuticals and imaging agents. He has served in senior leadership roles at Navidea BioPharmaceuticals Inc., Alseres Pharmaceuticals, Lantheus Medical Imaging (LMI), Bristol Myers Squibb (BMS), and DuPont. He was a Board Member of the Academy of Molecular Imaging and Chairperson of its Institute for Molecular Technologies.

Paul Hopper – Executive Chairman: Mr. Hopper is the Founder of Radiopharm Theranostics. 25 years of experience in biotech, healthcare and life science companies focused on start-ups and rapid growth companies. Previous and current Boards include Imugene, Chimeric Therapeutics, Viralytics (sold to Merck in 2018 for \$500m), Prescient Polynoma, Arovella Therapeutics.

Ian Turner – Non-Executive Director: Mr. Turner is a highly experienced radiopharmaceutical and nuclear medicine supply and manufacturing expert with a distinguished C-level career across some of the leading corporations in the sector, including CEO and President of Siemens PETNET Solutions from 2010-2012. Prior to that he was General Manager of ANSTO Radiopharmaceuticals in Sydney, Australia's leading manufacturer of radioisotopes for the nuclear medicine sector. He was also Executive Director of PETNET Australia Pty Ltd, in various C-level roles at Varian Inc. in Palo Alto and Melbourne and a Director of Coqui Pharmaceuticals until 2019, a company involved in the supply of radioisotopes in the USA.

Michael Baker – Non-Executive Director: Dr. Michael is the CEO of ASX listed Arovella Therapeutics. Prior to Arovella Therapeutics he was an Investment Manager with the Australian life science fund, BioScience Managers and a senior manager at Hexima Limited. He has a PhD in Biochemistry and was awarded the prestigious Nancy Millis award for the most outstanding thesis for the Faculty of Science, Technology and Engineering 2010. He was an Alexander von Humboldt Research Fellow at the University of Cologne. He has an MBA from Melbourne Business School.

SCIENTIFIC ADVISORY BOARD (SAB)

Prof. Eric Aboagye – Prof. Aboagye is a Professor of Cancer Pharmacology and Molecular Imaging at Imperial College London. He is a Fellow of the Academy of Medical Sciences and was awarded the British Institute of Radiology Sir Mackenzie Davidson Medal in 2009. His group is interested in the discovery and development of new methods for experimental clinical cancer molecular imaging. In the past 5 years, the team has invented and translated three novel cancer diagnostics into human application. He has acted as an advisor to GE-Healthcare, GSK, Roche and Novartis.

Dr. Johannes Notni – Dr. Notni is an acknowledged authority in the field of integrins and nuclear medicine. Until recently he was Professor at the Technical University of Munich where his research interests included radiometal complexes for nuclear imaging and therapy, MRI contrast agents, as well as preclinical evaluation and clinical translation of innovative radiopharmaceuticals in particular integrins. He received several awards, "Radiopharmaceutical Council Young Investigator Award, 1st Prize" of the Society of Nuclear

Medicine (2011) and the Innovation Prize in Medicinal and Pharmaceutical Chemistry from the Gesellschaft Deutscher Chemiker (GdCh) and Deutsche Pharmazeutische Gesellschaft (DPhG) (2013). In 2016, he received the EANM Springer Prize for the most cited paper in EJNMMI Research, and in 2017, the Georg von Hevesy Prize from the Deutsche Gesellschaft für Nuklearmedizin (DGN).

Dr. Hong Hoi Ting – Dr. Hong obtained his doctorate from the University of Oxford and has built an internationally recognized career as a radiopharmaceutical and nuclear medicine expert. He has worked in both industry and academia including Oxford, Westinghouse, Johnson and Johnson, GE Healthcare and C.A.S. Shanghai National Technology Centre. He is currently head consultant in nuclear medicine for CGN Nuclear Technology and a strategic consultant to ITM, a major German nuclear medicine isotopes supplier. He is the founder of NanoMab Technology Ltd from which Radiopharm licensed HER-2, TROP-2, PD-L1 and PTK7 targeting technologies.

Dr. David Ulmert – Dr. Ulmert obtained his medical degree at Lund University in Sweden. Currently at UCLA, he began a Postdoctoral Fellowship at Memorial Sloan Kettering in 2010 and has served as a Senior Research Scientist in the Medical Pharmacology Program and as the Technical Director for the Ludwig Center for Cancer Immunotherapy since 2014. Dr Ulmert's clinical research is focused on the study of risk factors and biomarkers related to clinically diagnosed prostate cancer and definitive end-points in non-screened cohorts. The overarching goal is to apply these specific tissue targeting vehicles for multimodal molecular imaging strategies, as well as for carriers of therapeutic agents.

Dr. Sara Hurvitz – Dr. Hurvitz is the most recent addition to the SAB, with the Company announcing her appointment on 6 December 2021. Dr. Hurvitz is Professor of Medicine at UCLA, co-director of the Santa Monica-UCLA Outpatient Oncology Practice, Medical Director of the Clinical Research Unit of the Jonsson Comprehensive Cancer Centre at UCLA and Director Breast Oncology. She earned her MD from the University of Southern California and served her internship/residency at UCLA. She received board certification in internal medicine, hematology and medical oncology. Dr. Hurvitz has won numerous awards over the past few years, among them the Marni Levine Memorial Breast Cancer Research Award 2008 through 2015. She has an active clinical practice specialising in the treatment of women with breast cancer. She is involved in designing, implementing and leading multiple national and international clinical trials testing new targeted therapies and also leads the preclinical evaluation of novel breast cancer targets in the Translation Oncology Research Laboratory at UCLA.

APPENDIX A - LICENCE AGREEMENTS

The Company has entered into a number of licence agreements securing the rights to develop the candidates. The licence agreement details that have been disclosed are provided below. We note that the upfront and milestone payments include a combination of cash and RAD scip as compensation.

Pivalate Milestone Payments		
Milestone	Requirement	Payment
Upfront		£180,000
Diagnostic Milestones		
1	Phase 1 clinical trial commencement, limited to each of the first three indications	£45,000
2	Phase 2 clinical trial commencement, limited to each of the first three indications	£225,000
3	Phase 3 clinical trial commencement, limited to each of the first three indications	£630,000
4	Grant of US Regulatory Approval	£900,000
5	Grant of EU (or UK) Regulatory Approval	£450,000
6	First commercial sale	£900,000
7	Aggregate Net Sales worldwide exceeding £10 million	£630,000
8	Aggregate Net Sales worldwide exceeding £50 million	£3.15 million
Therapeutic Milestones		
9	Clearing IND in the US or any country in the Territory	£90,000
10	Phase 1 clinical trial commencement, limited to each of the first three indications	£225,000
11	Phase 2 clinical trial commencement, limited to each of the first three indications	£630,000
12	Phase 3 clinical trial commencement, limited to each of the first three indications	£1.8 million
13	Grant of US Regulatory Approval	£3.6 million
14	Grant of MA in the EU (or UK)	£1.8 million
15	First commercial sale	£4.5million
16	Aggregate Net Sales worldwide exceeding £100 million	£2.7million
17	Aggregate Net Sales worldwide exceeding £500 million	£13.5million
Nano-mAbs Milestone Payments		
Milestone	Requirement	Payment
Upfront		US\$14.5 million*
1	IND allowance by the US FDA or the EMA or the NMPA (for either the HER-2 or the TROP-2 Therapeutic)	US\$5 million*
2	IND allowance by the US FDA or the EMA or the NMPA (for the PKT7 Therapeutic)	US\$500,000*
3	First patient dosed in the first Phase 1 therapeutic clinical trial	US\$1 million*
4	First patient dosed in the first Phase 2 therapeutic clinical trial	US\$2 million*
5	First patient dosed in the first Phase 3 therapeutic clinical trial, or approval of a licensed product	US\$3 million*
6	IND allowance by the US FDA or the EMA or the NMPA (for the PD-L1 Therapeutic)	US\$500,000*
7	First patient dosed in the first Phase 1 therapeutic clinical trial	US\$1 million*
8	First patient dosed in the first Phase 2 therapeutic clinical trial	US\$2 million*

9	First patient dosed in the first Phase 3 therapeutic clinical trial	US\$3 million*
---	---	----------------

#Payment in cash and shares.

*Payment to be made in the form of Ordinary Shares in the Company, based on the price of the seven-day volume weighted average price (VWAP) prior to the announcement of the milestone on the ASX.

AVB6 Integrin Milestone Payments

Milestone	Requirement	Payment
Upfront		US\$10 million#
Diagnostic Milestones		
1	Commencement of Phase 3 diagnostic clinical trial for (68Ga-Trivehexin)	US\$2 million
2	Any Marketing Approval in Japan, China, Hong Kong or the United States of (68Ga-Trivehexin) for diagnostic application	US\$3 million
Therapeutic Milestones		
3	*Last patient Phase 1 (Therapeutic)	US\$5 million
4	First patient Phase 2 (Therapeutic)	US\$10 million
5	*Last patient Phase 2 (Therapeutic)	US\$10 million
6	First patient Phase 3 (Therapeutic)	US\$15 million
7	*Last patient Phase 3 (Therapeutic)	US\$15 million
8	Any Marketing Approval in Japan, China, Hong Kong or the United States (Therapeutic)	US\$30 million

#Payment in cash and shares.

*According to the protocol, which excludes early termination for safety or other reasons.

PSA-mAb Milestone Payments

Milestone	Requirement	Payment
Upfront		US\$7 million
Diagnostic Milestones		
1	IND allowance	US\$3 million
2	*Last patient Phase 1	US\$5 million
3	First patient Phase 2	US\$11 million
4	*Last patient Phase 2B	US\$11 million
5	First patient Pivotal Study	US\$15 million
6	*Last patient Pivotal Study	US\$15 million
7	FDA submission	US\$7 million
8	FDA approval	US\$25 million
9	EMA approval	US\$10 million
10	PMDA approval	US\$5 million
11	Second indication, approval at first of FDA, EMA, PMDA	US\$10 million
Therapeutic Milestones		
12	Approval at first of FDA, EMA, PMDA	US\$5 million

DISCLAIMER

(a) Disclaimer

The information, reports, financial models, forecasts, strategies, audio broadcasts and other media (referred to as "Content" throughout this Legal Notice), provided on this web site has been prepared and issued by Altavista Research Pty Ltd trading as Independent Investment Research "IIR," Independent Investment Research Holdings Pty Ltd (ACN 155 226 074), as authorised to publish research under an Australian Financial Securities Licence (AFSL No 420170) which allows Independent Investment Research to offer financial service advice to retail and wholesale clients. Users of this web site should not act on any Content without first seeking professional advice. Whilst the Content contained on this web site has been prepared with all reasonable care from sources which we believe are reliable, no responsibility or liability is accepted by Independent Investment Research, for any errors or omissions or misstatements however caused. Any opinions, forecasts or recommendations reflect our judgement and assumptions at the date of publication or broadcast and may change without notice. Content on this web site is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. We are not aware that any user intends to rely on the Content provided or of the manner in which a user intends to use it. In preparing our Content it is not possible to take into consideration the investment objectives, financial situation or particular needs of any individual user.

Access by any user to this website does not create a client relationship between Independent Investment Research and the user. Users seeking to invest must obtain individual financial advice to determine whether recommendations are appropriate to their investment objectives, personal financial situation or particular needs, before acting on any recommendations. Any Content is not for public circulation or reproduction, whether in whole or in part and is not to be disclosed to any person other than the intended user, without the prior written consent of Independent Investment Research.

(b) Disclosure of Interest

General

Independent Investment Research, its officers, employees, consultants and its related bodies corporate have not and will not receive, whether directly or indirectly: any commission; fee; benefit; or advantage, whether pecuniary or otherwise, in connection with making any recommendation contained on this web site. Independent Investment Research, discloses that from time to time, it or its officers, employees and its related bodies corporate: may have an interest in the securities, directly or indirectly, which are the subject of these recommendations; may buy or sell securities in the companies mentioned in the Content; may effect transactions which may not be consistent with the recommendations in the Content; may have directorships in the companies mentioned in the Content; and/or perform paid services for the companies that are the subject of such recommendations.

However, under no circumstances, has Independent Investment Research been influenced, either directly or indirectly, in making any recommendations contained on this web site.

Corporate Research

Independent Investment Research has or may have, received a fee either directly by a company itself or by a third party, to provide coverage and/or corporate research (the "Fee"). Where a Fee has been received, Independent Investment Research does not publish:

Buy / Hold / Sell recommendations for the security or managed investment schemes.

(c) Copyright Protection

All Content at this web site is protected by copyright. Apart from any use permitted under the Copyright Act (Cth) 1968, you must not copy, frame, modify, transmit or distribute the material at this web site, without seeking the prior written consent of the copyright owner. Content on this web site is owned by the business Independent Investment Research. Users are prohibited from copying, distributing, transmitting, displaying, publishing, selling, licensing, creating derivative works or using any content on the web site for commercial or public purposes

Copyright 2010 Independent Investment Research. All rights reserved.

(d) Trade Marks

The trade marks and logos displayed on this web site belong to Independent Investment Research or other parties. Such trade marks include registered trade marks and trade marks pending registration. Users are prohibited from using any of these trade marks, without seeking the prior written consent of IIR or such third party, which may own the trade mark content on this web site.

(e) Limitation of Liability

To the fullest extent permitted by the law, Independent Investment Research and any of its officers, employees, agents, consultants or related bodies corporate disclaim any liability, whether based in contract, tort, strict liability or otherwise, for any direct, indirect, incidental, consequential or special damages arising out of or in any way connected with the use of any Content made available on this web site by any person or entity.

(f) No Warranties

Independent Investment Research does not make any claims, promises, guarantees, representations or warranties regarding the accuracy, completeness or fitness for purpose of the Content made available on this web site. All information on this web site is provided to you on an as is basis, without warranty of any kind either express or implied. To the extent that research can be provided by third parties, Independent Investment Research makes no warranty or representation as to the accuracy or completeness of such information displayed on this site, and accepts no liability for errors or omissions arising from such third party information. To the fullest extent permitted by law, under no circumstances will Independent Investment Research be liable for any loss or damage caused by users reliance upon information obtained through this web site. It is the responsibility of the user to evaluate the accuracy, completeness or usefulness of any information, opinion, general advice or other content made available through this web site. Furthermore, Independent Investment Research does not warrant or represent that this web site is error free or free from viruses or defects. A user must do all that is necessary (including using virus checking software) to satisfy itself that accessing this website will not adversely affect its system.

For further information, please contact IIR at: client.services@independentresearch.com.au



Independent Investment Research (Aust.) Pty Limited

SYDNEY OFFICE

Level 1, 350 George Street
Sydney NSW 2000
Phone: +61 2 8001 6693
Main Fax: +61 2 8072 2170
ABN 11 152 172 079

MELBOURNE OFFICE

Level 7, 20–22 Albert Road
South Melbourne VIC 3205
Phone: +61 3 8678 1766
Main Fax: +61 3 8678 1826

DENVER OFFICE

355 S Teller Street
Suite 200
Lakewood 80226
Denver Colorado USA
Phone: +1 161 412 444 724

MAILING ADDRESS

PO Box H297 Australia Square
NSW 1215