21 September 2021

ASX Announcement

CORPORATE OVERVIEW AND IRD INVEST 2021 PRESENTATION

MELBOURNE Australia, 21 September 2021: AdAlta Limited (ASX:1AD), the clinical stage drug discovery company developing novel therapeutic products from its i-body platform, is pleased to announce Dr Tim Oldham, CEO and Managing Director will present highlights from the Company's newest corporate overview at IR Department's, *IRD Invest 2021* virtual investor conference Thursday September 23, 2021, 12.00 PM AEST (Sydney time).

The conference takes place on Wednesday 22 and Thursday 23 September, with the overarching theme *"Addressing the need for change"*. In keeping with the theme, day two will focus specifically on addressing new needs in patient care.

Dr Oldham's presentation will draw on a newly revised corporate overview (which is attached), and will provide an update on AdAlta's contribution to the conference theme, highlighting:

- The power of the i-body technology as a drug discovery platform to address diseases that have challenged traditional antibodies;
- The potential and progress of lead asset AD-214 as a new option for the degenerative and fatal disease Idiopathic Pulmonary Fibrosis;
- The use of i-body enabled PET imaging agents to identify early the responders to cancer immunotherapies; and
- The potential of i-body enabled CAR-T cells to overcome the challenges posed by solid tumours.

IRD Invest is free to attend and investors are invited to register ahead of time by CLICKING THIS LINK. You will receive a confirmation email with instructions on how to access the briefing once you have completed the registration form.

A recorded copy of AdAlta's presentation will be made available after the event.

Authorised for lodgement by:
Tim Oldham
CEO and Managing Director
September 2021

Notes to Editors

About AdAlta

AdAlta Limited is a clinical stage drug development company headquartered in Melbourne, Australia. The Company is using its proprietary i-body technology platform to solve challenging drug targeting problems and generate a promising new class of single domain antibody protein therapeutics with the potential to treat some of today's most challenging medical conditions. The i-body technology mimics the shape and stability of a unique and versatile antigen-binding domain that was discovered initially in sharks and then developed as a human protein. The result is a

range of unique proteins capable of interacting with high selectivity, specificity and affinity with previously difficult to access targets such as G-protein coupled receptors (GPCRs) that are implicated in many serious diseases. i-bodies are the first fully human single domain antibody scaffold and the first based on the shark motif to reach clinical trials.

AdAlta's strategy is to maximise the products developed using its next generation i-body platform by internally discovering and developing selected i-body enabled product candidates against GPCRs implicated in fibrosis, inflammation and cancer and partnering with other biopharmaceutical companies to develop product candidates against other classes of receptor, in other indications, and in other product formats.

AdAlta has advanced its lead i-body candidate, AD-214, into clinical studies. AD-214 is being developed for the treatment of Idiopathic Pulmonary Fibrosis (IPF) and other human fibrotic diseases, for which current therapies are sub-optimal and there is a high unmet medical need.

The Company is also entering collaborative partnerships to advance the development of its i-body platform. It has an agreement with GE Healthcare to co-develop i-bodies as diagnostic imaging agents against Granzyme B, a biomarker of response to immuno-oncology drugs, a program now in preclinical development. It also has an agreement with Carina Biotech to develop precision engineered, i-body enabled CAR-T cell therapies for cancer to bring new hope to patients with solid tumours.

Further information can be found at: https://adalta.com.au

For more information, please contact:

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AdAlta
next generation protein therapeutics

Corporate overview

September 2021

Disclaimer

Investment in AdAlta is subject to investment risk, including possible loss of income and capital invested. AdAlta does not guarantee any particular rate of return or performance, nor do they guarantee the repayment of capital.

This presentation is not an offer or invitation for subscription or purchase of or a recommendation of securities. It does not take into account the investment objectives, financial situation and particular needs of the investor. Before making any investment in AdAlta, the investor or prospective investor should consider whether such an investment is appropriate to their particular investment needs, objectives and financial circumstances and consult an investment advisor if necessary.

This presentation may contain forward-looking statements regarding the potential of the Company's projects and interests and the development and therapeutic potential of the company's research and development. Any statement describing a goal, expectation, intention or belief of the company is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercialising drugs that are safe and effective for use as human therapeutics and the financing of such activities.

There is no guarantee that the Company's research and development projects and interests (where applicable) will receive regulatory approvals or prove to be commercially successful in the future. Actual results of further research could differ from those projected or detailed in this presentation. As a result, you are cautioned not to rely on forward-looking statements. Consideration should be given to these and other risks concerning research and development programs referred to in this presentation.

AdAlta's purpose

To use our unique i-body technology to create multiple novel therapeutics for debilitating diseases that have proven difficult to drug with traditional antibodies

AdAlta today

- **i-body platform**: can create therapeutics addressing targets underserved by traditional antibodies

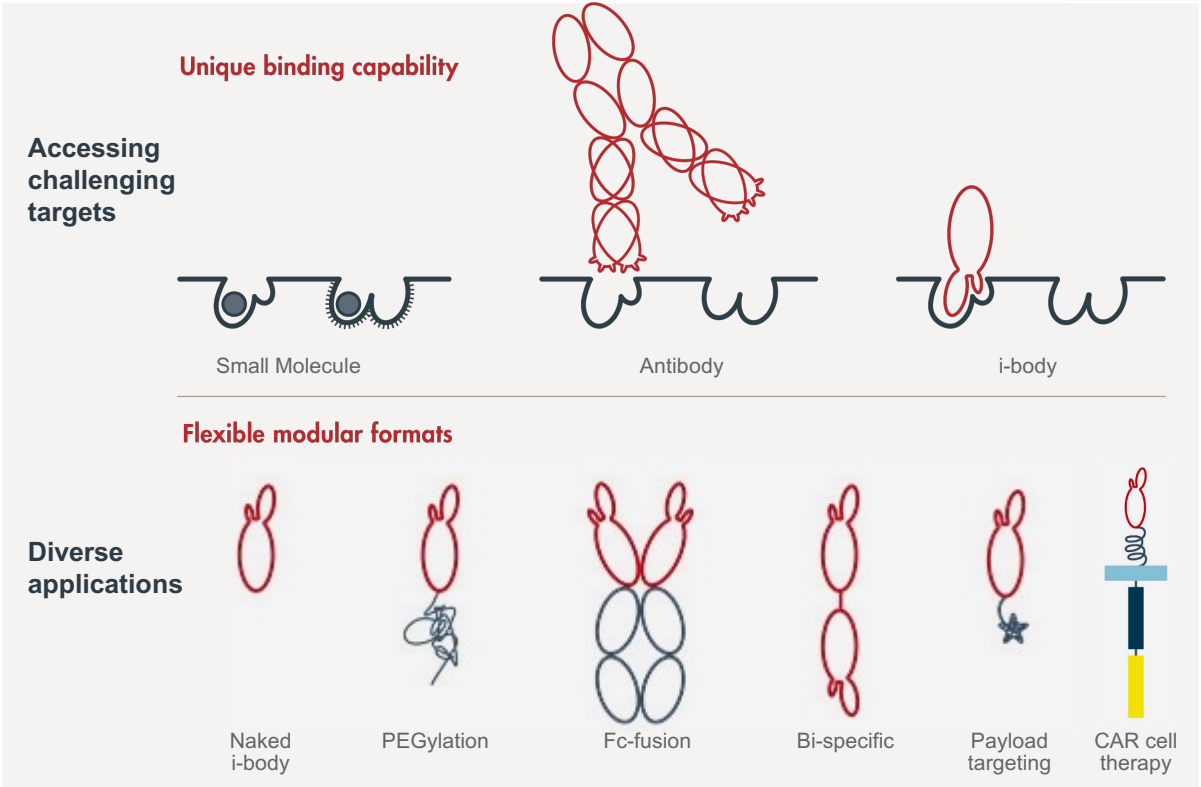
- **Lead asset AD-214**: preparing inhaled version for Phase II in IPF
  - US$3b IPF market today

- **Two co-development collaborations**
  - GZMB PET imaging agent with **GE Healthcare**: US$6.4b PET imaging agent market
  - i-body enabled CAR-T with **Carina Biotech**: US$20b market by 2028

- **Building out pipeline** with additional programs: targeting 10 by 2023

What is the i-body advantage?

All the selectivity and specificity of antibodies with greater versatility and tunability



Small size, flexible binding domain
Confers unique binding capability for targets challenging traditional antibodies; enables modular drug design across diverse applications

Minimising off-target side effects
Unique binding capability potentially allows greater selectivity and specificity, tunable affinity

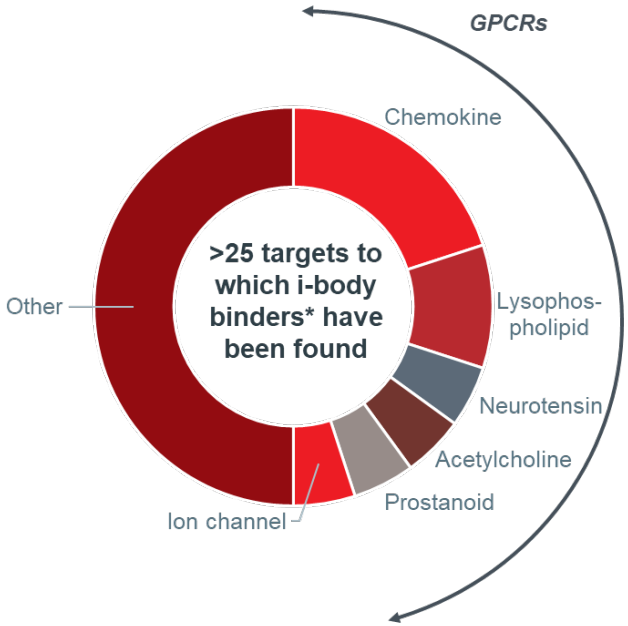
Multiple drug administration routes
Amenable to multiple administration routes (e.g. injection, inhalation and topical)

Robust
Resilient to pH and temperature cycling

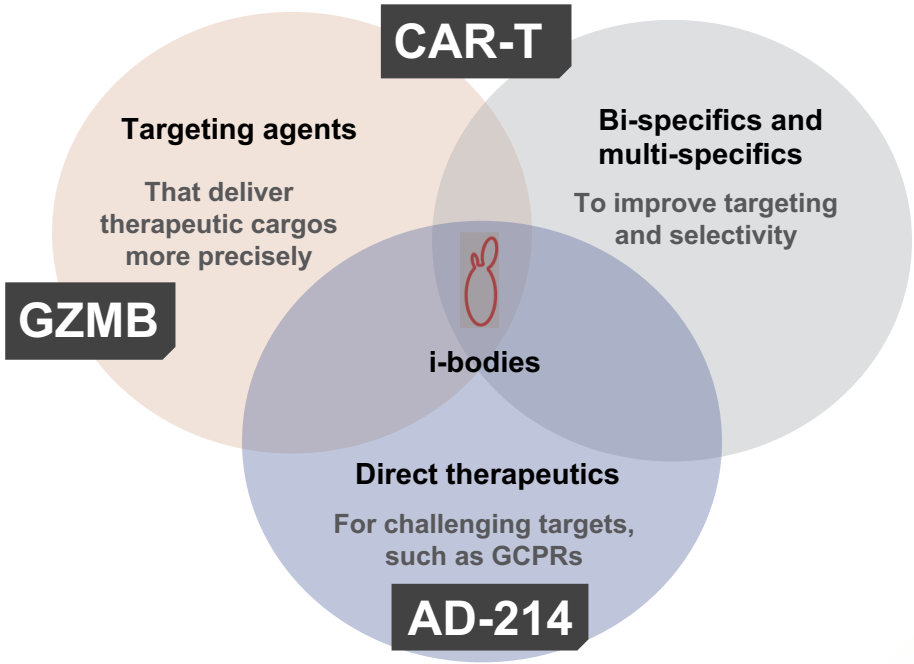
An immensely powerful drug discovery platform

i-body technology can enable a wide range of therapeutic and diagnostic products

Wide range of target classes

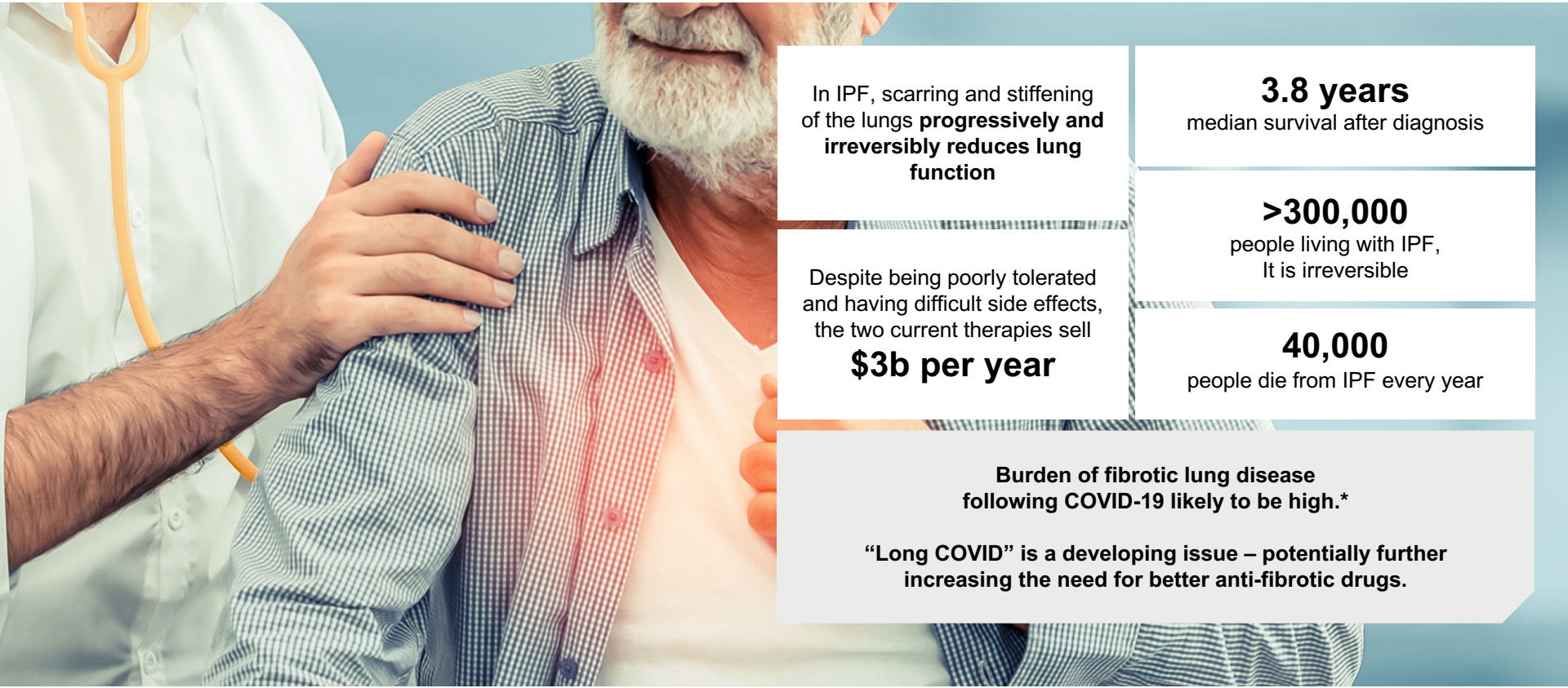


Wide range of product formats



Idiopathic Pulmonary Fibrosis (IPF)

AdAlta's first target, already a $3b market, is a degenerative, fatal disease in dire need of improved treatment options: i-bodies have been designed to target a novel mode of action to address this medical need



In IPF, scarring and stiffening of the lungs **progressively and irreversibly reduces lung function**

Despite being poorly tolerated and having difficult side effects, the two current therapies sell

$3b per year

3.8 years
median survival after diagnosis

>300,000
people living with IPF,
It is irreversible

40,000
people die from IPF every year

Burden of fibrotic lung disease following COVID-19 likely to be high.*

"Long COVID" is a developing issue – potentially further increasing the need for better anti-fibrotic drugs.

* PM George, et al, "Pulmonary fibrosis and COVID-19: the potential role for antifibrotic therapy", Lancet published online May 15, 2020.

AD-214: first in class treatment for fibrosis

AD-214's initial focus is IPF

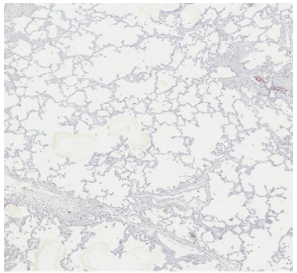
First-in-class (novel mode of action) treatment for fibrosis (can affect almost every organ)

Targets a receptor called **CXCR4: a critical player in the development of fibrosis** and progression of many cancers

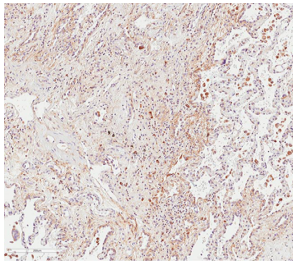
Initial focus is **Idiopathic Pulmonary Fibrosis (IPF)**, one of a group of **Interstitial Lung Diseases (ILDs)**

Blocking CXCR4 reduces fibrosis in animal models

Human Lung Tissue



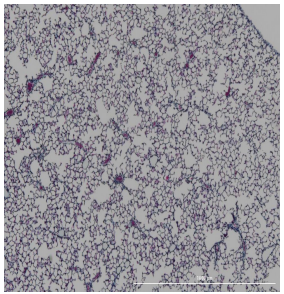
Normal



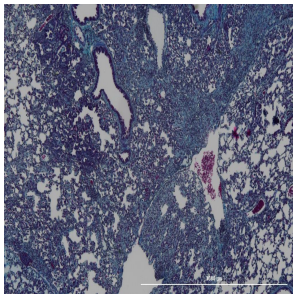
Diseased

Brown stain shows increased amount of CXCR4 in fibrotic lung tissue

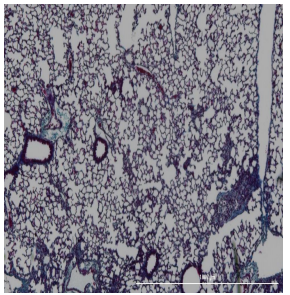
Mouse model of lung fibrosis



Normal mouse lung tissue



IPF mouse lung tissue*



IPF mouse lung tissue + AD-214*

Purple stain shows amount of collagen (fibrosis)

* IPF tissue images taken 21 days after bleomycin (BLM) was administered to induce fibrosis; mouse treated with AD-214 received 10 mg/kg AD-214 every 4 days from day 8 after bleomycin administration.

AD-214 Phase 1 clinical and pre-clinical imaging programs

The Phase 1 program has demonstrated the safety and target engagement of AD-214 in healthy volunteers

Phase 1 protocol in healthy volunteers - COMPLETE

Part A

Single dose, healthy volunteers (HV SAD)

42 participants, 7 cohorts

0.01-20 mg/kg dose

Completed

Part B

Multiple ascending dose, healthy volunteers (HV MAD)

8 participants

3 x 5 mg/kg (every 2 weeks)

Completed

Objectives of Phase 1 Part A and B:

- Top-line safety data
- Explore optimal dosing intervals
- Support FDA IND applications for further studies in all CXCR4 indications

PET imaging*

Pre-clinical

Development of RL-AD-214 for PET imaging – complete

Distribution and efficacy studies

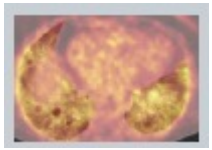
Intravenous and inhaled administration

Healthy and IPF disease models (mouse and large animal)

Clinical (future)

Single and multi-dose in fibrotic diseases

Open label with standard of care**



Objectives of PET imaging program:

- Effect of elevated lung CXCR4 on distribution of AD-214
- Correlation of AD-214 distribution with efficacy
- Explore CXCR4 expression as potential biomarker
- Safety of AD-214 in combination with standard of care**

* Supported by a Biomedical Translational Bridge grant from Medical Research Future Fund and MTPConnect
** Includes pirfenidone, nintedanib or non-pharmacologic intervention.

AD-214 Phase I results

AD-214 is well tolerated in single doses to 20 mg/kg and multiple doses to 5 mg/kg* in healthy volunteers

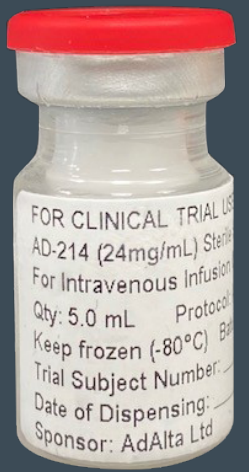
Results from single and multiple dose studies in health volunteers

AD-214 is well tolerated
- No dose limiting toxicities or adverse events of clinical concern
- No concerning clinical laboratory or organ function results
- No concerning immune responses or clinical symptoms
- Moderate infusion reactions in some participants linked to formulation
- Consistent with Non-Human Primate (NHP) toxicology studies

AD-214 engages the CXCR4 receptor
- Clear markers of target (CXCR4) engagement observed
- Receptor occupancy sustained at high levels for extended periods
- No evidence of tolerance or accumulation across multiple doses

Pharmacokinetics and tissue distribution support inhalation route
- No evidence of tolerance or drug induced clearance
- Rapid serum clearance consistent with rapid and strong binding to CXCR4 and rapid distribution to liver (observed in pre-clinical imaging)
- Non-systemic route of administration preferred (inhalation for IPF)

Lung
IPF/ILD



* Multiple dose data subject to database lock and full statistical analysis; receptor occupancy data only available to 4 hours after end of third infusion; antidrug antibody data only available to 14 days after second infusion (pre third infusion)

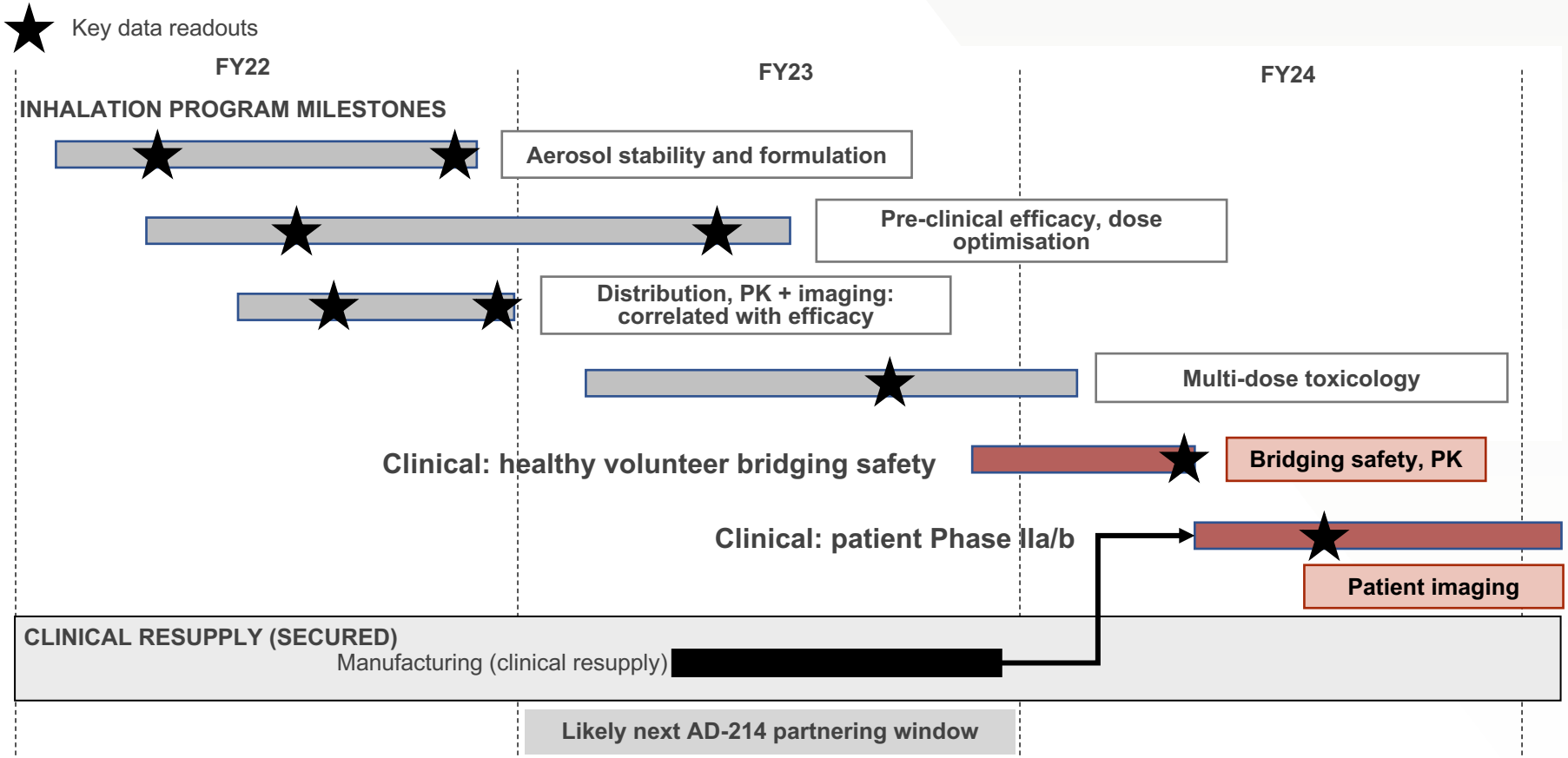
Phase II planned with inhaled formulation

Delivery of AD-214 by inhalation has potential to improve bioavailability, be more convenient for patients, be more cost effective, and improve partnering flexibility

Improved bioavailability	• AD-214 delivered direct to fibrotic areas • First pass liver clearance avoided • Dosing schedule flexibility to optimise receptor coverage
Greater patient convenience	• Self administration (no scheduled clinic visits; freedom of movement) • Less invasive
Enhanced cost effectiveness	• Lower drug dose means lower cost of goods • Lower healthcare costs for administration
Diversified partnering options	• Potential to partner AD-214 by indication using different routes of administration - broadens potential long term options

Key milestones to de-risk AD-214 development

Quarterly milestones to de-risk asset; extensive use of pre-clinical imaging; AD-214 partnering window from FY23



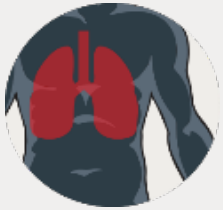
AD-214: multiple indication extension options

Each additional indication could address multiple markets with U$ billion potential

Data in tissue and animal models show that AD-214 may improve fibrosis across a range of fibrotic diseases and cancer:
multiple indication extension potential

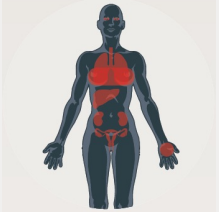
Indication specific formulations and routes of administration may enhance partnering potential

- **LUNG (lead indication - inhaled):** Idiopathic Pulmonary Fibrosis with natural extension to Interstitial Lung Disease
- **EYE (intravitreal injection):** Wet-Age Related Macular Degeneration
- **CANCER**: 23 different cancers, enhancement of I/O drugs*
- **KIDNEY**: Chronic kidney disease*
- **LIVER:** NASH*
- **SKIN (topical, local injection)**: Hypertrophic scars



Lung
IPF/ILD
>US$3b

Eye
Wet-AMD
>$15b



Cancer
23 different cancers, I/O
>$1b ea

Kidney
RENAL FIBROSIS
>US$10b

Liver
NASH & CIRRHOSIS

Skin
SCLERODERMA

* Subject to development of a satisfactory, improved intravenous formulation.

IPF late-stage clinical landscape: a narrow development field

AdAlta's novel mode of action and Orphan Drug Designation expected to be attractive to partners as an alternative to, and in combination with other therapies

Company	Drug	Mode of action	Phase	Orphan Drug Designation
Roche	**PRM-151**	Endogenous human protein that directs the immune cells called macrophages to turn off and reverse fibrotic processes	Phase 3 (Mono or combination therapy)	YES
FibroGen	**Pamrevlumab**	Human monoclonal antibody (mAb) that inhibits the activity of connective tissue growth factor (CTGF) to inhibit myofibroblast activation, collagen deposition and other pro-fibrotic factors	Phase 3 (Monotherapy)	YES
United Therapeutics CORPORATION	**Inhaled Treprostinil**	Small molecule analogue of prostacyclin that reduces pulmonary artery pressure through direct vasodilation of the pulmonary and systemic arterial vascular beds	Phase 3 (Supportive care/ symptom reduction)	YES
AdAlta	***AD-214***	*i-body-Fc fusion protein blocking CXCR4 to inhibit inflammatory cell migration, epithelial to mesenchymal transition and fibrotic growth factor production, and deposition of collagen*	*Phase I*	*YES*

IPF partnering: valuable options as early as Phase I

IPF assets have recently yielded attractive deal terms at early stages of development – first partnering window for AD-214 in FY2023

泰德制药 TIDE PHARMACEUTICAL

Feb-21: License by Graviton
Phase I
US$517.5m milestones

bridgebio

Jul-19 license by Boehringer Ingelheim
Phase I
€45m upfront + €1.1b milestones

OncoArendi Therapeutics

Nov-20: Galapagos collaboration
Phase II ready
€320m milestones

Promedior

Nov-19 acquired by Roche – *Phase II*
US$390m upfront + US$1b milestones
[Aug-15 BMS option to buy
US$150m upfront + US$1.25b milestones]

Redx

Aug-20: License by AstraZeneca
Preclinical
Upfront US$17m + milestones US$360m

ENLEOFEN

Jan-20 platform license by Boehringer Ingelheim
Preclinical
upfront undisclosed + US$1b milestones

GZMB i-body asset: GE Healthcare co-development collaboration

Second asset in pre-clinical development; and could generate royalty revenue sooner than a therapeutic due to shorter diagnostic development timelines

AdAlta
next generation protein therapeutics

Unique i-body platform

- i-body discovery
- Manufacturing process development

GE Healthcare

Leading global supplier of PET imaging equipment and tracers

- ^{18}F chemistry, final product manufacture
- Pre-clinical, clinical proof of concept
- Commercialisation

PET imaging of granzyme B

Potential to show whether **cancer immunotherapies** are working

US$6.4b PET imaging market

Diagnostic development **timelines substantially shorter** than for therapeutics

Pipeline asset at no financial cost to AdAlta

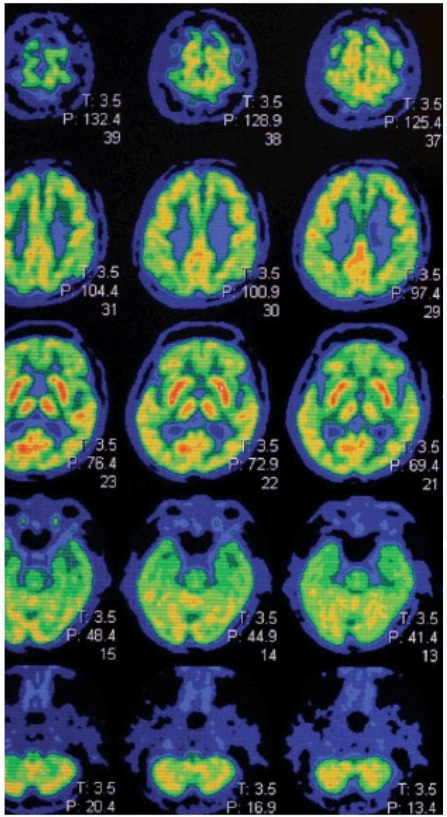
- AdAlta earns research fees, development and sales milestone payments and royalties on product sales
- A$1.5 million revenue (milestones and research fees) earned to June 2021

September 2021 status

- Panel of GZMB specific i-bodies identified
- Pre-clinical proof of concept studies underway

Immuno-oncology (I/O) PET imaging

US$6.4b PET imaging market: could help identify the 20-40% of patients who will respond to revolutionary I/O drugs faster



Immuno-oncology (I/O) drugs **reactivate the patient's own immune system** to fight cancer

PET imaging agents have **substantially** shorter development time than therapeutics

Granzyme B (GZMB) is produced by immune cells to kill cancer

Potential biomarker of immune system activated by I/O drugs

PET imaging GZMB can help **identify responders early**: improves cost, choice of therapy, accelerates drug development

US$95 billion I/O market[1]

Only **20-40%** of patients respond to I/O drugs[2]

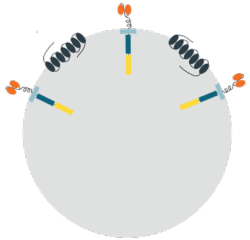
US$6.4 billion
PET imaging agent market[3]
Largest products >US$400m[4]

1. 2026 forecast by ResearchandMarkets.com, Immuno-Oncology - Market Analysis, Trends, Opportunities and Unmet Needs - Thematic Research, March 2021
2. P Sharma, et al, Cell 168(4) 707 (2017)
3. 2027 forecast by Global Industry Analysts, Imaging Agents: Global Market Trajectory and Analytics, April 2021
4. AD Nunn, J Nucl Med (2007) 169

i-body enabled CAR-T assets: Carina collaboration

Third program entering discovery to generate precision engineered CAR-T products providing new hope for patients with cancer

World-leading proprietary **CAR-T** technologies for superior **access, potency and resilience**



carina biotech

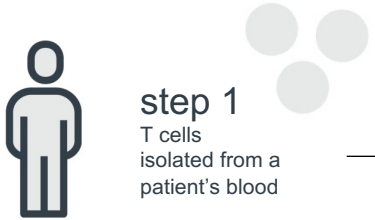
Unique i-body platform for exceptional **reach and targeting** capability

AdAlta
next generation protein therapeutics

To develop precision engineered, i-body enabled, CAR-T therapies that provide new hope for patients with cancer

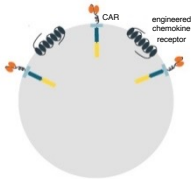
CAR-T therapies are revolutionising cancer treatment

Reprogramming a patient's own immune system to fight cancer is a fast growing market at the cutting edge of medicine



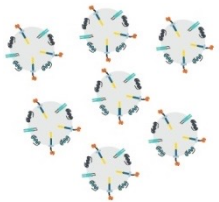
step 1
T cells isolated from a patient's blood

step 2
T cells genetically modified to express both the CAR molecule + chemokine receptor/s



- ✓ Takes advantage of the body's natural immune response to pathogens
- ✓ Immune cells removed from blood and re-engineered so they "see" cancer as a pathogen

step 3
Newly created CAR-T cells expanded



step 4
CAR-T cells infused back into patient

>US$1b	earned by CAR-T therapy products in 2020[3]
2m	addressable patient population within next 10 years[1]
US$20.3b	revenue forecast for 2028[1]
50%	solid tumour share of revenues by 2030[2]

1. Grandview Research, "T-cell Therapy Market Size, Share & Trends Analysis" Feb 2021
2. Polaris Market Research, "CAR-T Cell Therapy Market Share, Size Trends, Industry Analysis Report", June 2021
3. Yescarta and Kymriah market size estimates calculated from various publicly available sources. Estimates vary and different analyses may give different results.

Carina collaboration details

AdAlta and Carina will jointly develop up to 5 targets to create CAR-T, bi-specific CAR-T and dual CAR-T cell therapy products

Up to 5 targets

- **Proof of principle already achieved** (*in vitro*)
- Targets not yet disclosed
- **Combine targets for bi-specific and dual-targeted CARs**

Significant new, shared IP

- Share costs, research to *in vivo* proof of concept
- AdAlta + Carina will **jointly own collaboration IP**

Post proof of concept commercialisation options

- Can continue to develop products together, progress independently or out license
- **Products** emerge from the collaboration at proof of concept

Attractive deal space

- Biotech and immuno-oncology segment: very attractive deal space
- **Large biotech and pharma companies are actively sourcing CAR-T products**

AdAlta assets and business model

AdAlta's value is the sum of multiple assets: the i-body platform itself + the internal pipeline of wholly owned assets developed for out-licensing + the external pipeline of assets co-developed with biopharmaceutical companies

External assets: co-develop

GE Healthcare

Granzyme B i-body enabled PET imaging agents for use in immuno-oncology

carina biotech

Precision engineered, i-body enabled CAR-T cells providing new hope for patients with cancer

Internal assets: wholly owned

AdAlta
next generation protein therapeutics

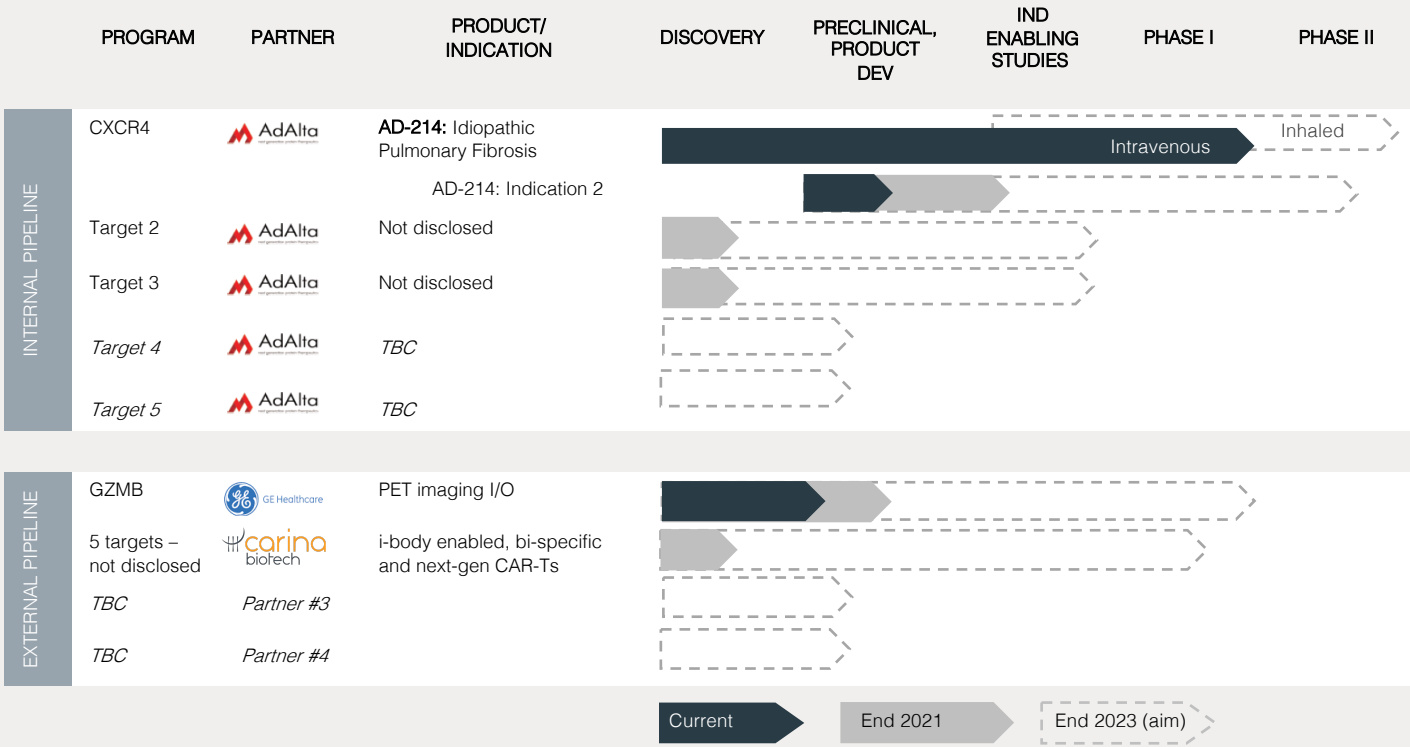
In-house pipeline of drug candidates:
license to pharma for major upfronts, milestones and royalties
Lead candidate: AD-214

Two more targets to be added in 2021

Platform

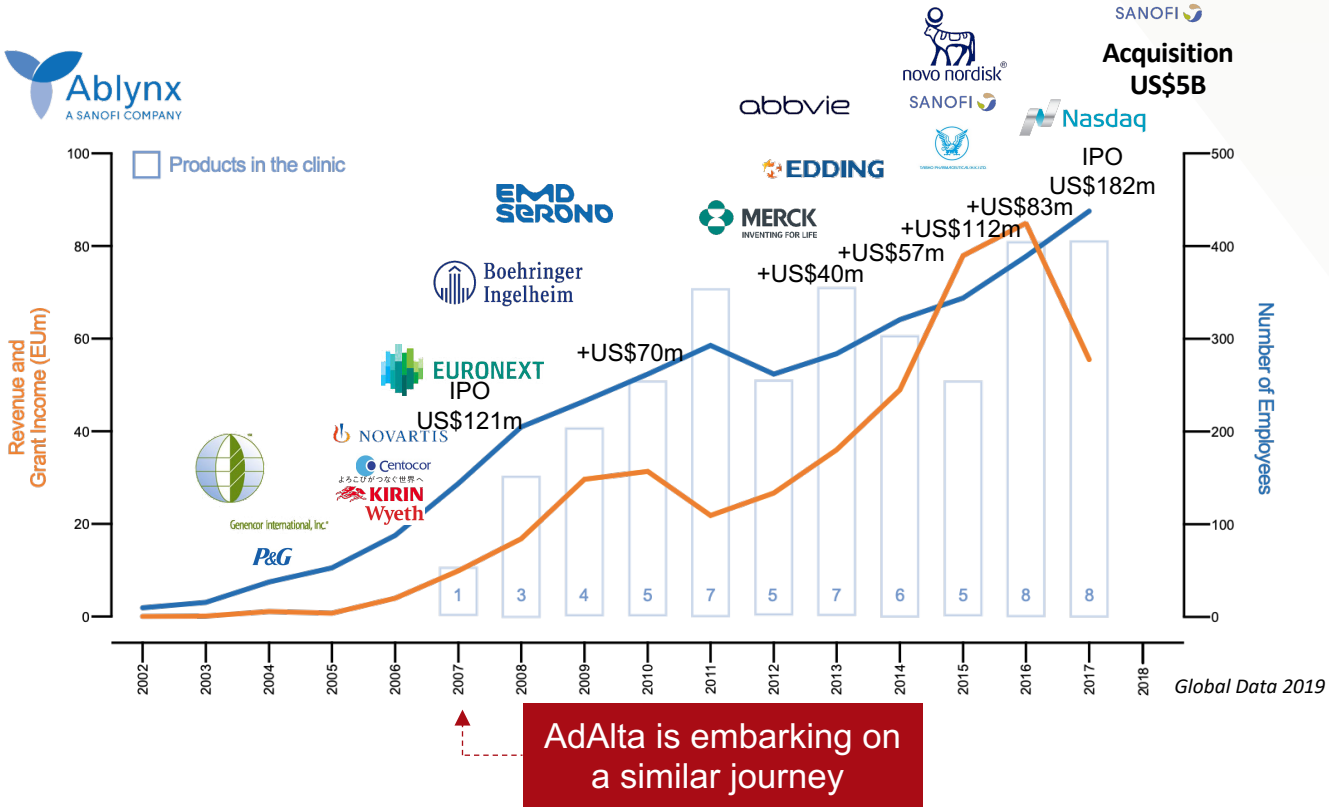
Patented, diverse i-body discovery platform:
20 billion different i-bodies for drugging undruggable targets

An expanding pipeline of i-body enabled products



The potential of our strategy: Ablynx case study

Multiple internal and external assets drive value, attract partners



GPCR platform exits

HEPTARES therapeutics

Feb-15 acquired by Sosei
Phase Ib + 7 preclinical leads
US$400m

receptos

Jul-15 acquired by Celgene
Ph II/III + GPCR platform

US$7.8b

Ablynx
A SANOFI COMPANY

Feb-18 acquired by Sanofi
8 clinical, 37 preclinical candidates
€3.9b

Source: Platinum Asset Management, AdAlta analysis

Milestones for remainder of FY2022

Milestones extended through end of FY2022

	AD-214	Other Assets
H1 2021	✓ Orphan Drug Designation for AD-214 in IPF ✓ Results of Phase I single dose studies in healthy volunteers ✓ Phase I multi-dose studies in healthy volunteers commence ✓ Japanese patent covering AD-214 granted ✓ PET tracer pre-clinical development results	✓ Progressing the GE Healthcare collaboration from discovery to pre-clinical development
H2 2021	✓ Top line results of multi-dose studies in healthy volunteers • Pre-clinical data in additional indications • Preliminary stability of AD-214 following nebulisation	✓ Entering a second collaboration agreement (Carina Biotech) • Finalise research project outlines for initial Carina targets • Commencing development of two new i-body enabled internal pipeline assets
H1 2022	• Initial efficacy of inhaled AD-214 in IPF animal model • Imaging inhaled AD-214 in the lungs of healthy and fibrotic disease model animals • Inhaled dose and dose scheduling optimisation	• New i-body 2.0 IP filed • GE Healthcare preclinical update • First experimental results from Carina collaboration

Industry experienced leadership and advisors

Team with experience from discovery through manufacturing, clinical and commercialisation

Board

Dr Paul MacLeman
Chair

Liddy McCall
Director (alt: Dr James Williams)

Tim Oldham, PhD
CEO & Managing Director

Dr Robert Peach
Independent Director

Dr David Fuller
Independent Director

Executive

Tim Oldham, PhD
CEO & Managing Director

Mick Foley, PhD
Chief Scientific Officer

Dallas Hartman, PhD
Chief Operating Officer

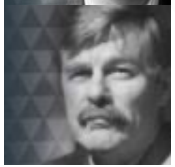
Claudia Gregorio-King, PhD *VP Clinical Product Development*

Michael Rasmussen
Consultant Medical Expert

Scientific Advisory Board

Brian Richardson
Drug discovery and development expert

Steve Felstead
Clinical development



John Westwick
Pulmonary drug discovery and development

Corporate snapshot

Key financial details (14 Sep 2021)

ASX code	1AD
Market capitalisation	**A$23.05m**
Share price (12 month closing range)	A$0.094 ($0.081 - 0.195)
12 month return	(10)%
Ordinary Shares (daily volume)	245,179,578 (589,886)
Unlisted Options	7,514,067
Cash (30 Jun 2021)	**A$5.79m**

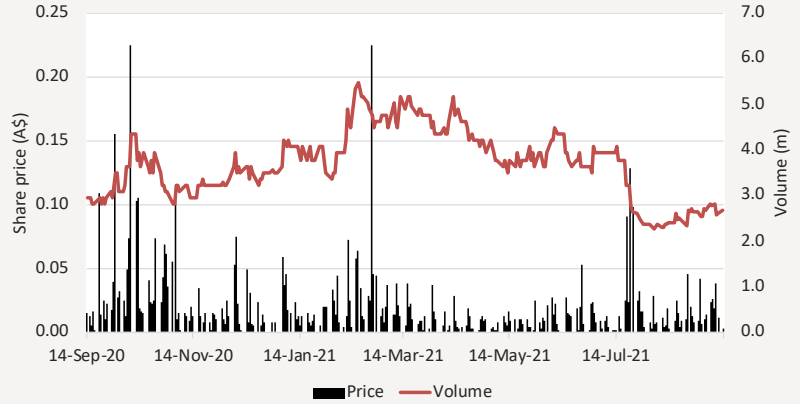
Major shareholders (14 Sep 2021) %

Yuuwa Capital LP	22.0
Platinum Asset Management	11.6
Meurs Holdings Pty Ltd	7.3
Radiata Super Pty Ltd	3.1
Sacavic Pty Ltd	1.8
Other (1,552 total holders)	*54.2*
Total	**100%**

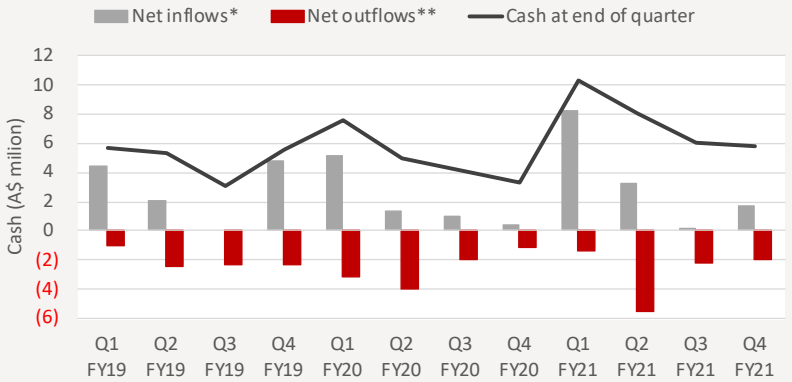
Analyst Coverage

Edison
Pitt Street Research
Securities Vault

Share price performance (last 12 months)



Quarterly cash flows (A$ million)



Investment proposition

i-body platform to create value

Patented, validated i-body platform for asset creation: designed for "difficult" targets, multiple modalities

Lead asset advancing to Phase II

AD-214: first-in-class asset for multiple fibrotic indications and cancer
Phase I complete; clear path to Phase II in IPF

>$3b market potential in first indication

2 x co-development collaborations with biopharma to leverage platform

✓ GE Healthcare: PET imaging in I/O $6b market

✓ Carina Biotech: CAR-T $20b market

Clear vision for growth

Build on existing clinical and commercial validation of platform to add internal programs, expand collaborations

Leading expertise

Experienced drug development team in place

Regular near-term news flow

AdAlta substantially undervalued relative to peers, with near term and mid-term value drivers

AdAlta
next generation protein therapeutics

Contact:

Tim Oldham, CEO and Managing Director
enquiries@adalta.com.au
www.adalta.com.au

AdAlta
next generation protein therapeutics

Appendix: Strategy

Our strategy

i-body technology platform and library
Proof of Principle against > 25 targets

Select novel, challenging drug targets where the i-body structure is most advantaged

A

In-house pipeline of drug candidates
Usually GPCRs in fibrosis, inflammation, oncology
Invest to value inflection (typically Phase I or II)

Licence to pharma
Major upfronts + milestones and royalties

B

Pharma, biotech partnerships
Partner-led target selection and development
Partner-enabled complex formats eg bivalent drugs

Co-develop with pharma, biotech
Research fees + milestones and royalties

Multiple i-body drugs and diagnostics
New drug class
Potential in multiple disease indications

GE Healthcare

carina biotech

AdAlta has successfully transitioned to the expansion phase of our growth plan

A Maximise catalysts from current funded base (2020)

From…

- i-body platform in clinic for difficult drug targets
- Clinical and commercial validation: AD-214 Phase I trial and GE partnership

B Expand (~mid 2020 to late 2021)

Via…

- Laying the foundations for growth
- Progress AD-214
- Build internal and external pipeline
- Continuous platform improvement

C Accelerate (from ~mid-2021)

Towards 2023…

- Multi-product, multi-partner platform company
- AD-214 partnering, new indications
- ~5 internal GPCR programs
- 3-5 co-development partnerships

AdAlta
next generation protein therapeutics

Appendix: i-bodies

i-bodies: next generation antibodies

i-bodies are human proteins that belong to the class of next-generation antibodies

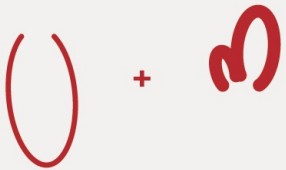
Generation of the i-body

1

Shark antibody binding domain with unique long loop

2

Two long loops are engineered onto the human protein. These enable tight binding to the drug target and have a therapeutic effect



A **human** protein that is the same shape as the shark antibody is the backbone or scaffold protein of the i-body

3

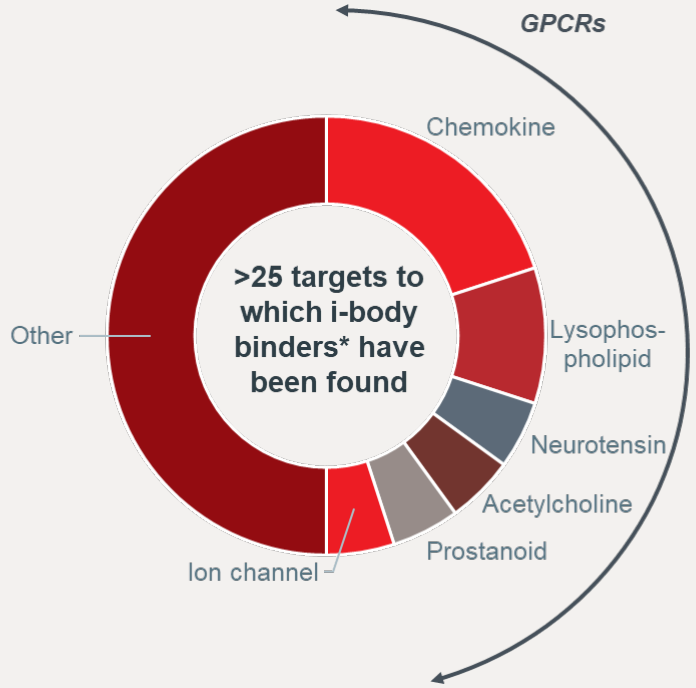
Each unique i-body has different binding loops. The i-body library has 20 billion unique i-bodies

AdAlta **i-body** is the combination of a human protein that mimics the shape of the shark antibody with unique long loop binding sites

The long loops of the i-body have exceptional targeting and binding properties, providing therapeutic access to drug targets that have evaded traditional monoclonal antibodies

Drug targets include G-protein-coupled receptors (GPCRs), currently the most heavily investigated class of drug targets

An immensely powerful drug development platform



Demonstrated i-body platform capability

- G-protein coupled receptors (GPCRs)
- Fibrosis, inflammation, oncology
- Diagnostics (PET tracers; cancer imaging)
- Chimeric antigen receptor (CAR) cell therapy

GPCRs are the most heavily investigated class of drug today and 80% of GPCR targets are yet to be effectively exploited

*Includes both i-body and VNAR/IgNAR formats

AdAlta
next generation protein therapeutics

Appendix: AD-214

AD-214: road to the clinic

Validated target

- CXCR4
- Player in inflammatory, fibrotic processes
- Biomarker, prognostic indicator

Novel mode of action, IP

- Patented CXCR4 i-body antagonist
- CXCR4 expressed on diverse cell types
- Inhibition of fibrotic cell migration

GMP manufacturing

- Fc-fusion format
- CDMO: KBI Biopharma
- IND-ready CMC package

NHP GLP toxicology

- Very clean tox profile
- Half-life supports weekly dosing
- Sustained receptor occupancy

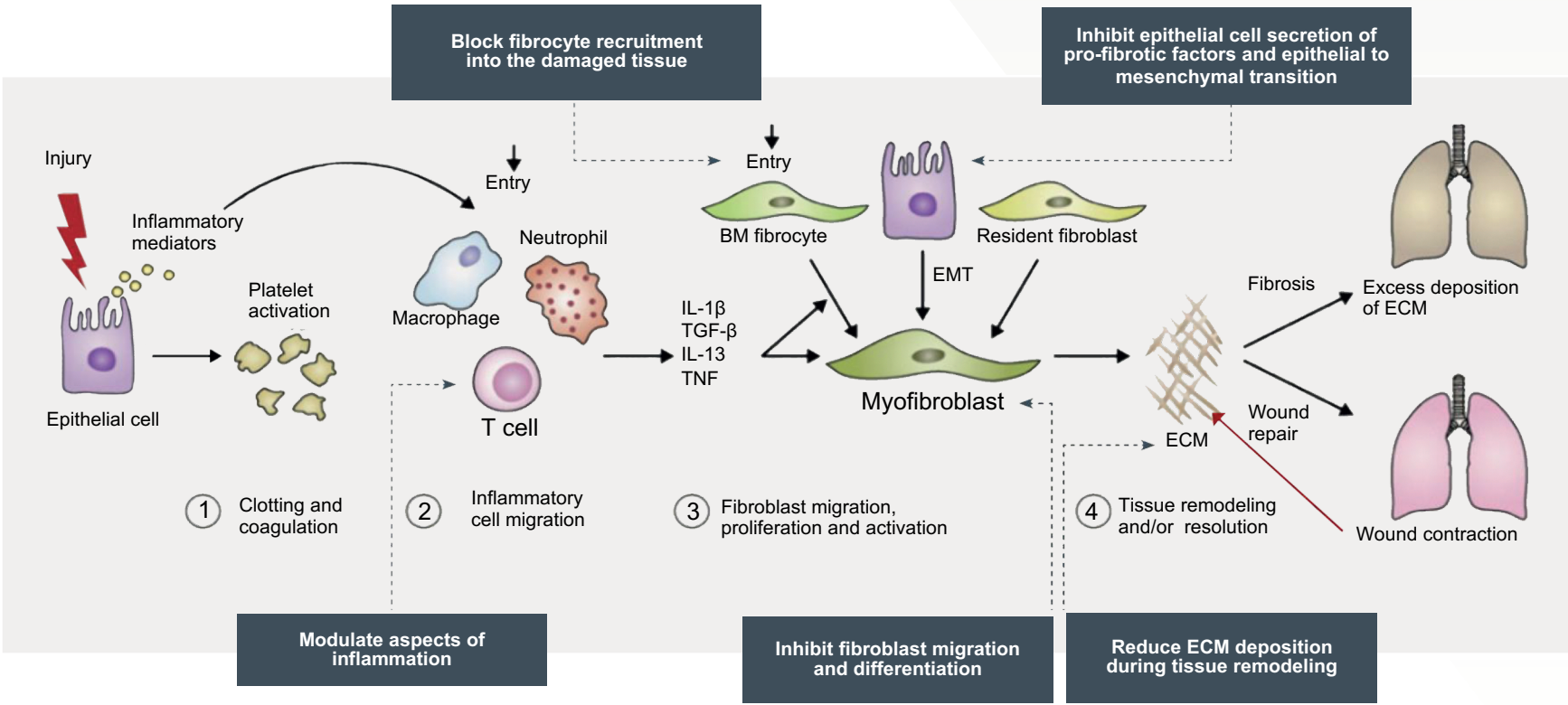
NHP GLP toxicology

- Bleomycin mouse model of IPF
- Ashcroft Score, gene expression, collagen
- Eye, kidney, liver cancer PoC

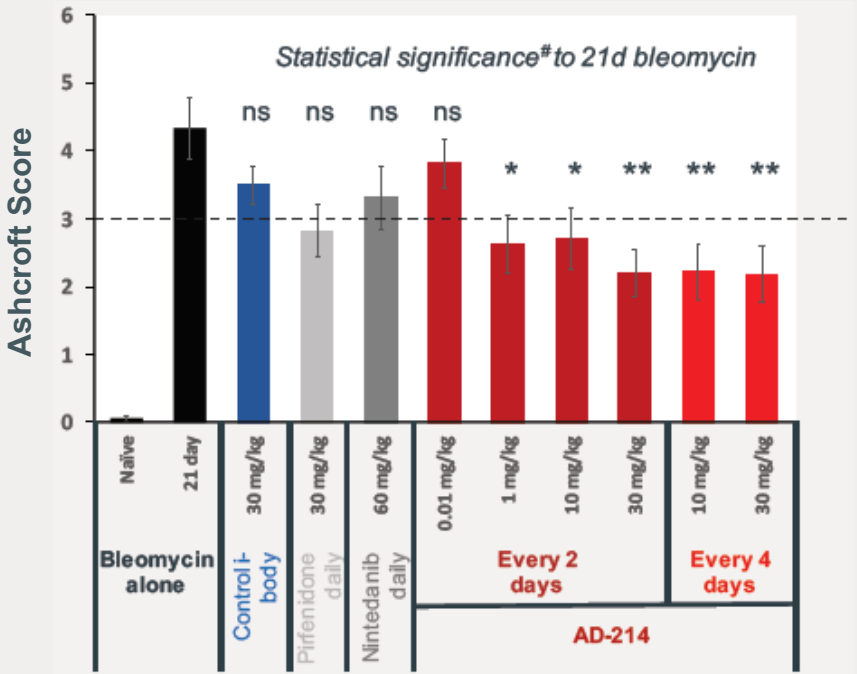
Pre-IND meeting:
Panel of pre-clinical studies "generally sufficient" to support an Investigational New Drug application
The Phase I trial design is "reasonable"

Orphan Drug Designation: granted

AD-214 inhibits key features of the fibrogenic pathway with novel MOA



AD-214 induced reduction in progression of fibrosis in mouse bleomycin model



AD-214 reduced Ashcroft Score with statistical significance compared to bleomycin treated mice at:

- 1-30mg/kg every second day
- 10-30mg/kg every fourth day

Wide range of dosing regimens can be used to test efficacy

- 10mg/kg every second day exhibited effectiveness by most study parameters
- Human equivalent dose: 1mg/kg (estimated)

AD-214 efficacy demonstrated in gold standard IPF disease model

Supportive of potential human therapeutic window beginning as low as 1mg/kg

NHP GLP toxicology: AD-214 safe

3 non-human primate studies completed
Good Laboratory Practice (GLP) study to evaluate safety and toxicology

10mg/kg, 30mg/kg and 100mg/kg multiple doses over four weeks plus recovery (human equivalent dose 32mg/kg)

AD-214 well tolerated with no deaths, no AD-214-related clinical signs, no changes in a panel of clinical observations:

- body weight
- ophthalmoscopy
- blood pressure
- electrocardiography
- respiratory function
- neurological function
- coagulation
- urinalysis
- organ weight
- macroscopic and microscopic findings

Minor, transient, completely reversible increase in total white cell and circulating CD34+ cells

Small, transient, completely reversible decrease in serum total protein and albumin at highest dose only (100 mg/kg)

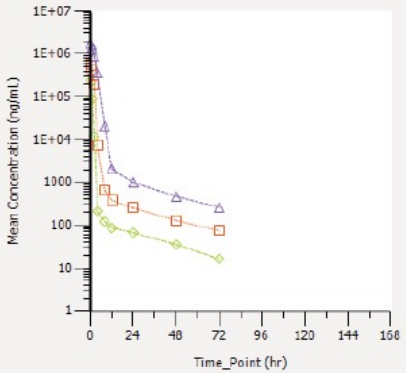
Tox study results were in line with expectations and in keeping with previous studies

No major organ toxicity has been observed on repeat dosing at high doses
No suggestion of off-target toxicities

Non-human primate GLP toxicology: Phase I dose justification

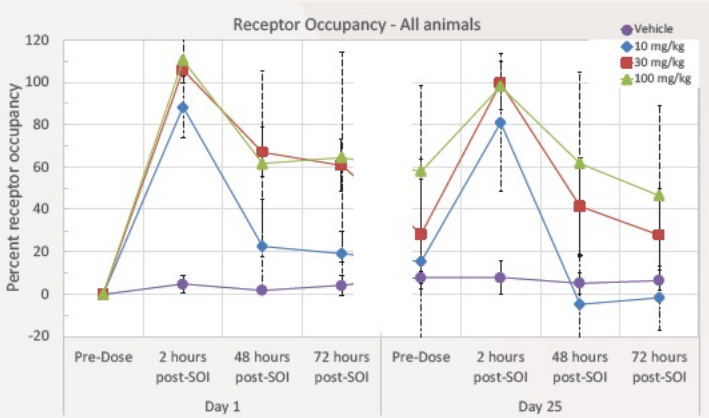
Pharmacokinetics

- Elimination half-life 22-29h
- Human equivalent: ~71h (estimate)
- AD-214vailable for >3 days



Pharmacodynamics

- >60% receptor occupancy* for 72h at >30mg/kg
- Human equivalent: ~10mg/kg (estimate)
- High receptor binding for >3 days



Supportive of human therapeutic dose window including 10mg/kg intravenously, weekly or every second week

AD-214 Phase I healthy volunteer results

AD-214 is well tolerated in single doses to 20 mg/kg and multiple doses to 5 mg/kg*

AD-214 molecule is well tolerated in single and multiple doses (see Appendix for more detail)*

- No dose limiting toxicities or adverse events of clinical concern in single doses to 20 mg/kg
- Moderate infusion related reactions (IRRs) in 3 participants (2 drug, 1 placebo) receiving multiple 5mg/kg doses
  - Rapidly resolved at end of infusion
  - *Appear formulation related*
- No concerning clinical laboratory results, no adverse liver or other organ function detected
- *HREC approved progressing to 10 mg/kg*

AD-214 clearly engages the target CXCR4 receptor *in vivo**

- Dose dependent changes in biomarkers of CXCR4 engagement observed
- High and extended duration of receptor occupancy on circulating T cells
- *Biomarker response consistent across multiple doses at 5 mg/kg – no evidence of tolerance*

AD-214 pharmacokinetics are dose proportionate*

- Peak and total AD-214 exposure increases in a dose proportionate or more manner to 20 mg/kg, consistent across multiple doses at 5 mg/kg
- Elimination half-life 44±15 hours at 20 mg/kg
- *No evidence of tolerance or drug induced clearance*
- *Rapid distribution from plasma observed at all doses, consistent with rapid increase/saturation of receptor occupancy and preclinical imaging*

* Multiple dose data subject to database lock and full statistical analysis; receptor occupancy data only available to 4 hours after end of third infusion; antidrug antibody data only available to 14 days after second infusion (pre third infusion)

AD-214 Phase I healthy volunteer study: safety findings

Single doses to 20 mg/kg (42 participants)

- ***No dose limiting adverse events***
- ***No serious adverse events***
- ***No concerning clinical laboratory results***
- ***Dose escalation steps completed without concern***
- ***Adverse events (AEs) were non-concerning***
  - Predominantly mild
  - Three Grade 2 (moderate) AEs

Multiple doses 5 mg/kg (8 participants)

- ***No dose limiting adverse events***
  - Safety Management Committee and Human Research Ethics Committee approved progression to 10 mg/kg
- ***No serious adverse events***
- ***No concerning clinical laboratory results***
- ***Adverse events (AEs) profile supports safety of AD-214 molecule***
  - Predominantly mild
  - Three Grade 2 (moderate) treatment related AEs
  - Infusion related reactions (IRRs) reported in three participants – resolved rapidly when infusion ended
- ***IRRs linked to formulation***
  - Observed in participants receiving both AD-214 (2) and placebo (1)
  - Trended to increasing intensity and frequency with subsequent doses
  - Not associated with changes in vital signs, clinical, physical or cytokines
  - Protocol amended to include standard antihistamine and corticosteroid treatment options

AD-214 Phase I healthy volunteer study: immune response findings

Single doses to 20 mg/kg (42 participants)

- ***Isolated instances of minor cytokine elevation***
  - Transient and primarily low level of elevation of IL-6 and IL-8 in some participants (including placebos)
- ***No clinically significant cytokine release***
- ***Antidrug antibodies: detected in 11 participants***
  - Predominantly low titre
  - Characterisation pending
- ***No clinical symptoms related to immune response observed***

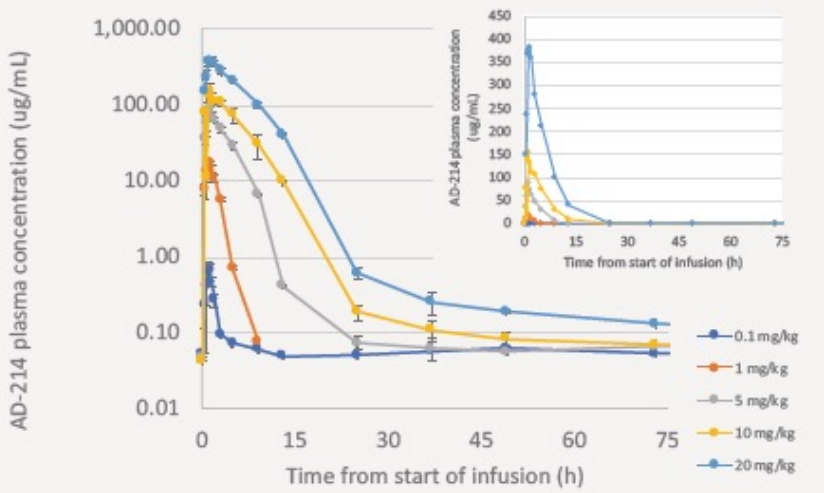
Multiple doses 5 mg/kg (8 participants)

- ***Sporadic and primarily low level elevation of cytokines IL-6 and IL-8, sporadic increases in TNF-a and IFN-g***
  - No clear association with IRRs or antidrug antibodies
  - Low level increases in IL-6 in many participants 24-48h post infusion
- ***No clinically significant cytokine response and no link to IRRs or ADAs***
- ***Antidrug antibodies: detected in three participants after second dose***
  - All low titre
  - One also reported IRR (association unlikely)
  - Characterisation pending
  - Third dose data pending

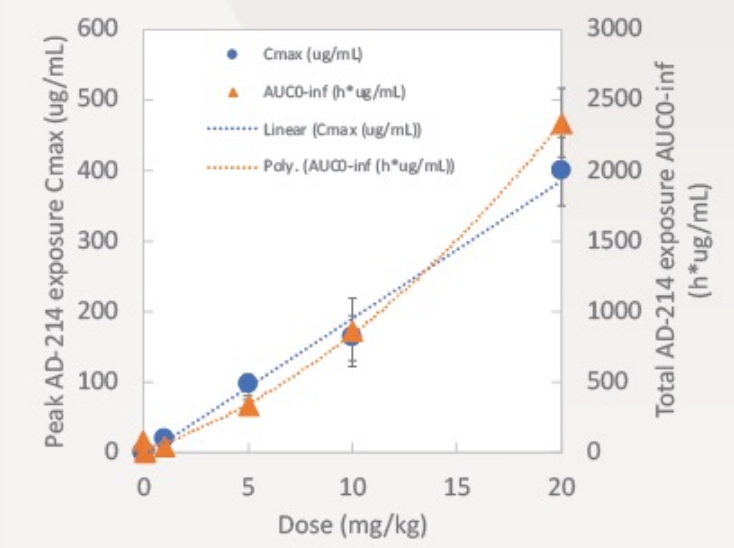
AD-214 pharmacokinetics increase proportionally with dose (single doses)

- **Maximum exposure, Cmax, increases in a dose proportional manner**
- **Total exposure, AUC0-inf, increases in a more than dose proportional manner**
- **Elimination half-life t1/2 ~40h**

AD-214 plasma concentrations (log and linear scale)



Maximum and total plasma exposure

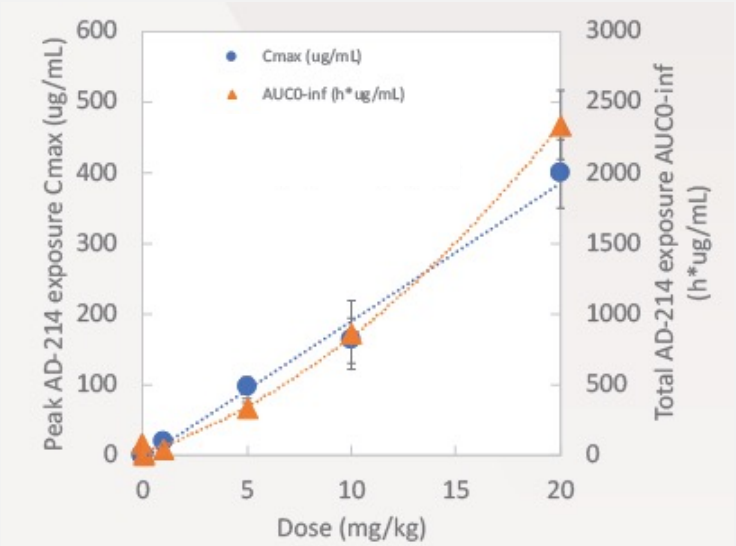


* Single ascending dose data presented as mean ± std dev

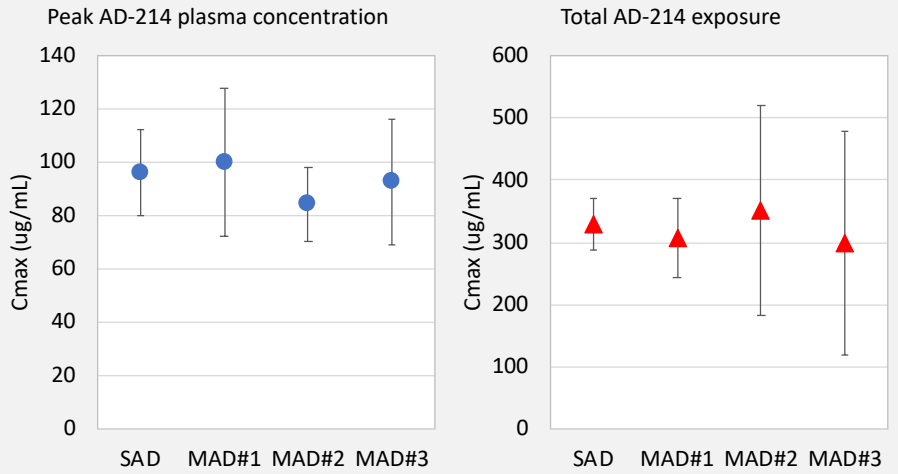
AD-214 pharmacokinetics

Maximum exposure, C_{max}, and total exposure, $AUC_{0\text{-}inf}$, increase in a dose proportionate manner and are consistent across multiple doses of AD-214 at 5 mg/kg, supporting absence of drug induced tolerance or clearance

Maximum and total plasma exposure - SAD



Maximum and total plasma exposure – 5 mg/kg



Pharmacokinetic profile

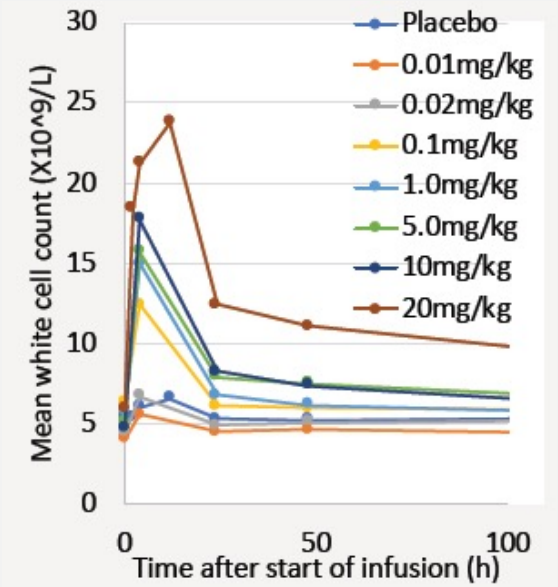
- Rapid distribution from plasma (consistent with rapid and high CXCR4 receptor occupancy and PET imaging distribution studies)
- Elimination half-life 44±15 h at 20 mg/kg

* SAD = single dose at 5mg/kg; MAD#1/MAD#2/MAD#3 are first, second and third multiple doses at 5 mg/kg; data presented as mean ± std dev

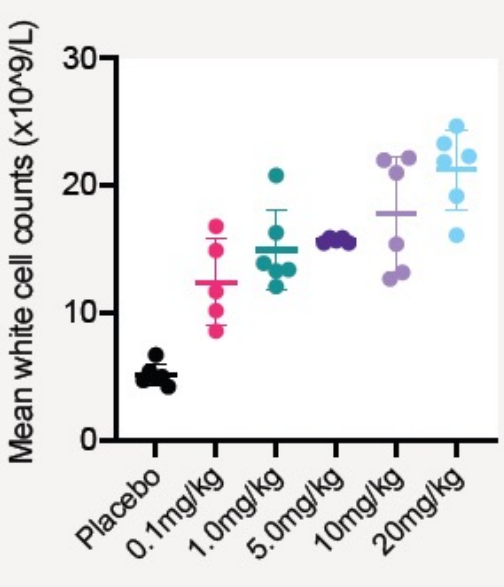
Transient white blood cell and blood stem cell increases indicate CXCR4 engagement

Observed in Phase I HV SAD*
Transient, dose dependent, increase in WCC and CD34+ counts at 4-12 hours consistent with CXCR4 blockade

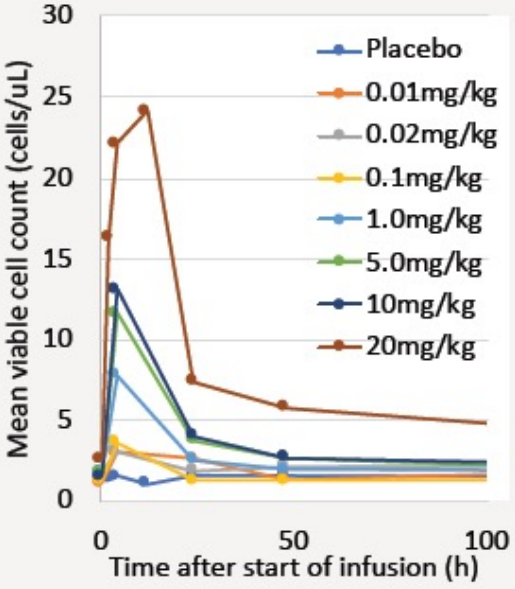
WCC counts



WCC counts at 4h



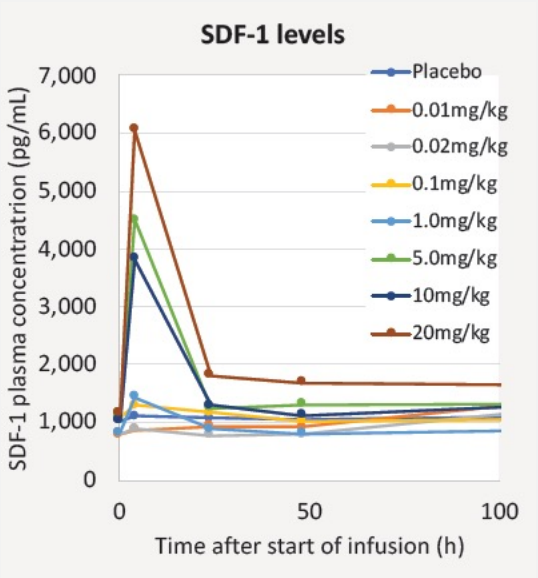
CD34+ cell counts

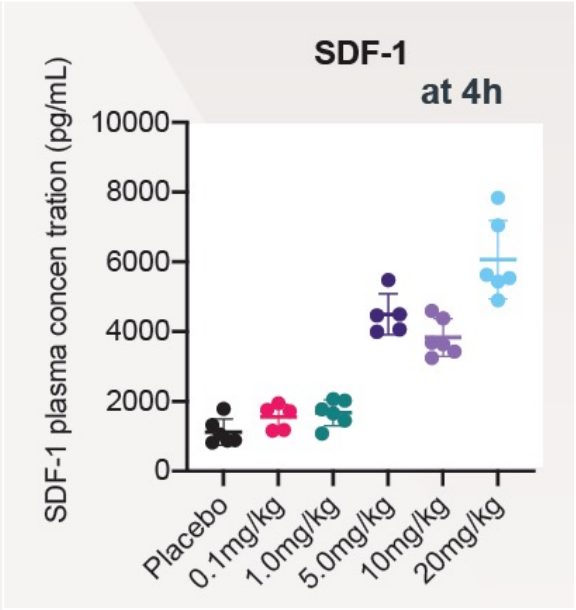


* Single ascending dose data presented as mean ± std dev

Transient increase in SDF-1 (natural ligand of CXCR4) consistent with CXCR4 engagement

Transient increases in SDF-1 levels at 4 hours in some participants, returning to baseline at 24h consistent with CXCR4 blockade





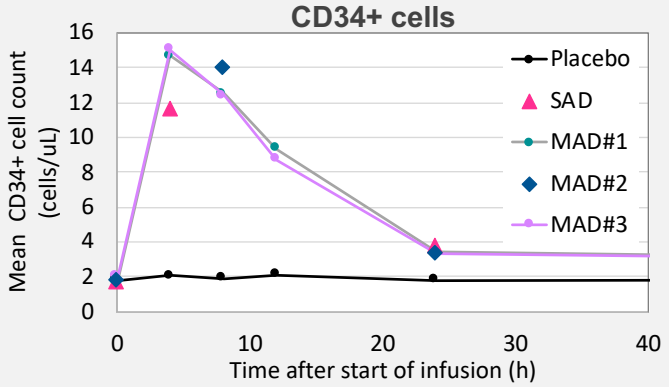
* Single ascending dose data presented as mean ± std dev

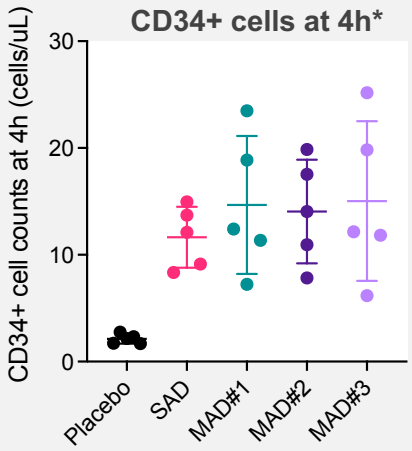
Biomarkers of CXCR4 receptor engagement at 5 mg/kg

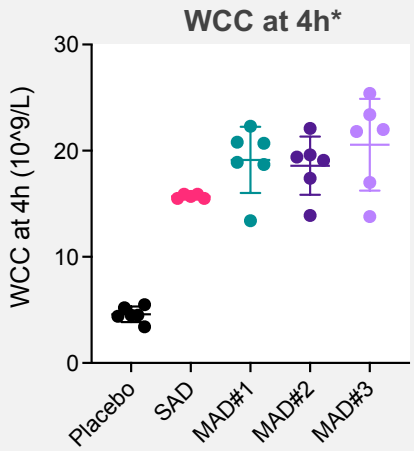
Transient increases in blood biomarkers demonstrate consistent engagement of the target receptor, CXCR4 across multiple AD-214 doses

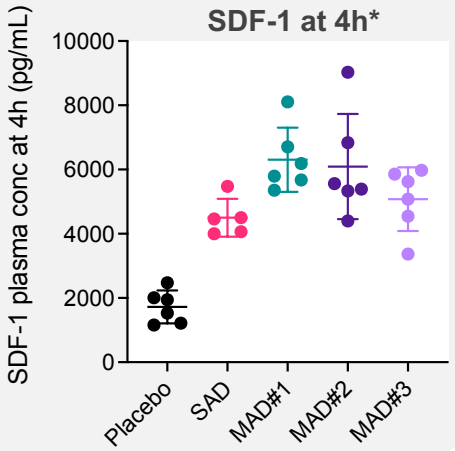
Biomarker data confirm single dose findings, consistent across multiple doses: no drug induced tolerance or accumulation

- White blood cell counts (WCC), haematopoietic stem cell (CD34+) counts and concentration of SDF-1 are biomarkers of CXCR4 engagement by AD-214
- Profile of biomarkers is consistent across multiple doses at 5 mg/kg*
- 100% T cell CXCR4 receptor occupancy achieved for at least 24h (data not shown, maximum duration analysis pending)



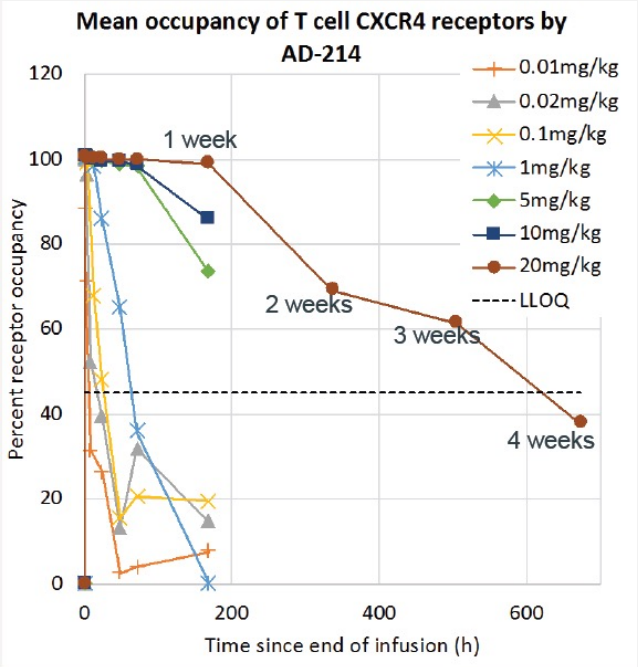






* SAD = single dose at 5mg/kg; MAD#1/MAD#2/MAD#3 are first, second and third multiple doses at 5 mg/kg; CD34+ and WCC data is shown at 8h for MAD#2

Sustained high levels of CXCR4 receptor occupancy on T cells



White blood cells naturally express CXCR4 in healthy individuals, providing an accessible surrogate for AD-214 target engagement or receptor occupancy (RO)

Understanding duration of RO is critical to inform dosing

Primary

- >70% CXCR4 RO at 7 days after 5-10 mg/kg infusion
- >60% CXCR4 RO at 21 days after 20 mg/kg infusion*
- ***Duration of RO is considerably longer than PK profile***

If replicated on CXCR4 receptors in fibrotic tissues, result supports extended dosing intervals despite relatively rapid clearance from circulation

* Receptor occupancy was monitored for one week at all dose levels except 20 mg/kg (4 weeks)

PET imaging studies inform dosing and route of administration

PET imaging with radiolabelled AD-214 supports early transition to inhaled route of administration

Rapid liver distribution and clearance reduces bioavailability

- Consistent with pharmacokinetic profile and a first pass clearance mechanism
- More than half administered dose not available to target site of action

CXCR4 binding capability retained, supportive of potential efficacy

- Consistent with observed biomarker, receptor occupancy and bleomycin mouse efficacy data

Liver distribution does not appear to affect safety profile

- No localization in hepatocytes (responsible for metabolic activity in liver)
- Consistent with lack of observed changes in liver function or toxicity in toxicology and clinical studies

Direct lung delivery of AD-214 could achieve a therapeutic dose at lower levels than intravenous delivery

Radiolabelled AD-214 will continue to be a useful development tool

Alternate intravenous formulations to be evaluated to reduce liver clearance

Inhalation in IPF

Numerous drugs have been formulated for inhalation in IPF and respiratory disease, a substantial number of biologics are in development for inhalation and off-the-shelf devices are available for rapid translation from intravenous route

Inhalation used regularly in IPF and other respiratory diseases

4 inhaled IPF therapeutics in development

United Therapeutics (Phase III) Galecto (Phase IIb)

Avalyn (Phase I/II) pieris (Pre-clinical, biologic)

- IPF patients routinely inhale salbutamol and steroids for symptom relief
- Inhaled therapeutics also marketed for asthma, COPD, cystic fibrosis

Substantial number of biologics in development for inhalation*

- 2 marketed inhaled biologics
- 19 clinical stage inhaled biologics including
  - Several fragment antibodies
  - 1 single domain antibody (nanobody)
- Majority sized between 15-80 kDa (AD-214 73 kDa, single i-bodies 15 kDa)
- Majority via solution for inhalation

Off-the-shelf devices for nebulization of liquid formulations

OMRON PHILIPS PARI VECTURA

- Smart mesh nebulisers assist compliance, accuracy, drug efficiency
- Low shear forces designed for biologics
- Liquid formulations: potential to utilize AD-214 intravenous formulation with minimal modification




* W Liang *et al*, Pulmonary delivery of biological drugs, *Pharmaceuticals* 2020, 12, 1025

A clinician's perspective on AD-214 results so far

- **Un-met need in IPF/ILD remains – need to progress new therapies**
- Research at The Alfred suggests **if targeting CXCR4 works in IPF it may work in other ILD's**
- **AD-214 is well tolerated and ready to move forward into multi-dose studies in healthy volunteers and patients**
- The **data is supportive of extending dosing interval to two weekly at least**
- **AdAlta approach is methodical and appropriate**
  - PET imaging strategy is particularly important as an innovative way to explore target engagement and mode of action in diseased tissue
- **Key insights anticipated from multidose and early patient studies (in addition to safety):**
  - CXCR4 receptor engagement in tissue
  - Nature of the anti-drug antibodies that are expected with a biologic
  - Further characterisation of biomarker responses: CD34+, white cells, SDF-1a

Prof Glen Westall
leading respiratory and lung fibrosis specialist

AdAlta Investor Briefing
10 March 2021

IPF Landscape: narrow and narrowing development field

AdAlta's novel mode of action expected to be attractive to partners

COMPANY	DRUG	MODE OF ACTION	PHASE	ORPHAN DRUG DESIGNATION
United Therapeutics	Inhaled Treprostinil	Reduction in pulmonary artery pressure through direct vasodilation of the pulmonary and systemic arterial vascular beds	Phase 3	Yes
Roche	PRM-151	Endogenous human protein that directs the immune system to naturally turn off and reverse the process of fibrosis	Phase 3	Yes
FibroGen	Pamrevlumab	Human monoclonal antibody (mAb) that inhibits the activity of connective tissue growth factor (CTGF)	Phase 3	Yes
Kadmon	KD025	Selective inhibitor of Rho-associated coiled-coil kinase 2 (ROCK2), a signaling pathway that modulates immune and fibrotic processes	Phase 2	Yes
Zelgen 泽璟制药	Jaktinib	Jaktinib is a JAK inhibitors inhibits the activity of one or more of the Janus kinase family of enzymes (JAK1, JAK2, JAK3, TYK2), thereby interfering with the JAK-STAT signaling pathway	Phase 2	No
Galecto	TD139	Small molecule inhibitor of the galactoside binding pocket of galectin-3	Phase 2	Yes
Celgene	CC-90001	Interferes with JNK (c-Jun N-terminal kinase), a protein that the body produces in various situations, with some evidence of participation in IPF	Phase 2	No
Boehringer Ingelheim	BI 1015550	A small molecule phosphodiesterase 4b inhibitor shown to have an anti-fibrotic effect in animal models	Phase 2	No
Nitto	ND-L02-s0201	Oligonucleotide drug using HSP47 (Heat Shock Protein 47) siRNA, which moderates collagen synthesis and secretion that causes fibrosis	Phase 2	No
PLIANT	PLN-74809	Inhibits integrins to block TGF-β1 activation, thereby preventing the growth of fibrotic tissue within the lung	Phase 2	Yes

AdAlta
next generation protein therapeutics

Appendix: CAR-T

Advantages of CAR-T therapy

For patients, CAR-T therapies offer a potentially curative, single shot therapy that is precision engineered to find and kill cancer

Can be curative

Even in patients whose cancers have returned after multiple prior standard therapies

Long lasting

Living therapy: a single treatment can attack cancer over months and then remain in the immune system long term to fight cancer cells that return

Highly targeted

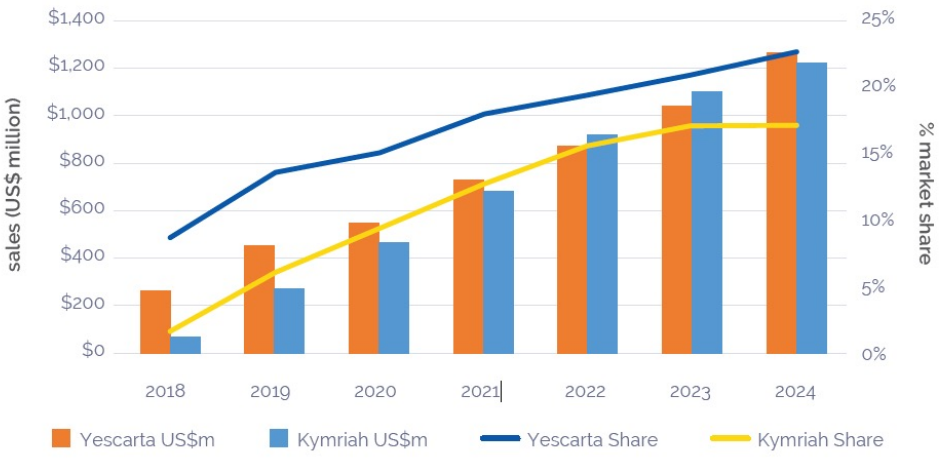
Precision engineered to engage with tumour cells and to minimise healthy tissue damage

CAR-T market opportunity

The CAR-T market formed in 2017, has already reached US$1b and is forecast to reach US$20b by 2028

- ✓ >$US1 billion earned by CAR-T therapy products in 2020
- ✓ Revenue of $US20.3 billion[1] forecast for 2028 as more CAR-T cell products are commercialised and science evolves
- ✓ New CAR-T product approvals to expand addressable patient population to 2 million within next 10 years[1]
- ✓ Solid tumours to account for >50% of CAR-T revenues by 2030[2]

Sales and market share growth for CAR-T products[3]



Yescarta – US$373,000[3] | Kymriah – US$475,000[3]

1. Grandview Research, "T-cell Therapy Market Size, Share & Trends Analysis" Feb 2021
2. Polaris Market Research, "CAR-T Cell Therapy Market Share, Size Trends, Industry Analysis Report", June 2021
3. Yescarta and Kymriah market size estimates calculated from various publicly available sources. Estimates vary and different analyses may give different results. Estimated cost of goods US$58,200 (range $40,000-$106,000, 2018) with pricing outcomes/value based.

Current approved CAR-T products

Five FDA approved CAR-T products for blood cancers generate strong revenues and are in high demand

Manufacturer	NOVARTIS	Kite A GILEAD Company	Kite A GILEAD Company	Bristol Myers Squibb	Bristol Myers Squibb
Product	KYMRIAH® (tisagenlecleucel) Suspension for IV infusion 	YESCARTA® (axicabtagene ciloleucel) Suspension for IV infusion 	TECARTUS® (brexucabtagene autoleucel) Suspension for IV infusion 	Breyanzi® (lisocabtagene maraleucel) 	Abecma® (idecabtagene vicleucel) 
Notable CAR-T transactions	UPenn and Novartis Alliance Aug 2012[2]	Gilead acquired Kite Aug 2017 US$11.9b[1]	Gilead acquired Kite Aug 2017 US$11.9b[1]	Celgene acquired Juno Jan 2018 US$9b; BMS acquired Celgene Jan 2019 US$74b[3]	Celgene acquired Juno Jan 2018 US$9b; BMS acquired Celgene Jan 2019 US$74b[3]
FDA approval	**August 2017** (acute lymphoblastic leukemia, large B cell lymphoma)	**October 2017** (large B cell lymphoma)	**July 2020** (mantle cell lymphoma)	**February 2021** (large B cell lymphoma)	**March 2021** (multiple myeloma)
Revenue 2020[4]	**US$474m**	**US$563m**	**US$44m**	**N/A**	**N/A**

1. https://www.businesswire.com/news/home/20210204006011/en/Gilead-Sciences-Announces-Fourth-Quarter-and-Full-Year-2020-Financial-Results
2. https://www.novartis.com/
3. https://www.celgene.com/newsroom/cellular-immunotherapies/celgene-corporation-to-acquire-juno-therapeutics-inc/
4. businesswire.com/news/home/20210204006011/en/Gilead-Sciences-Announces-Fourth-Quarter-and-Full-Year-2020-Financial-Results, novartis.com, celgene.com/newsroom/cellular-immunotherapies/celgene-corporation-to-acquire-juno-therapeutics-inc/

Collaboration synergies

By joining forces, AdAlta and Carina access complimentary expertise to create a toolbox to address three main challenges facing solid tumour CAR-T therapies. AdAlta expands its pipeline and further validates the i-body platform

Precision

Limited tumour-specific antigens – healthy tissue can be damaged

Incomplete expression of tumour-antigens – tumour can escape

AdAlta next generation protein therapeutics

i-bodies specifically designed to enable access to new, difficult antigens

Small size confers greater design flexibility, enabling bi-specific and dual CARs to enhance specificity

Performance

Tumour mass hard to penetrate for immune cells

carina biotech

Engineered Chemokine Receptor Platform directs CAR-T cells to and into solid tumours

Persistence

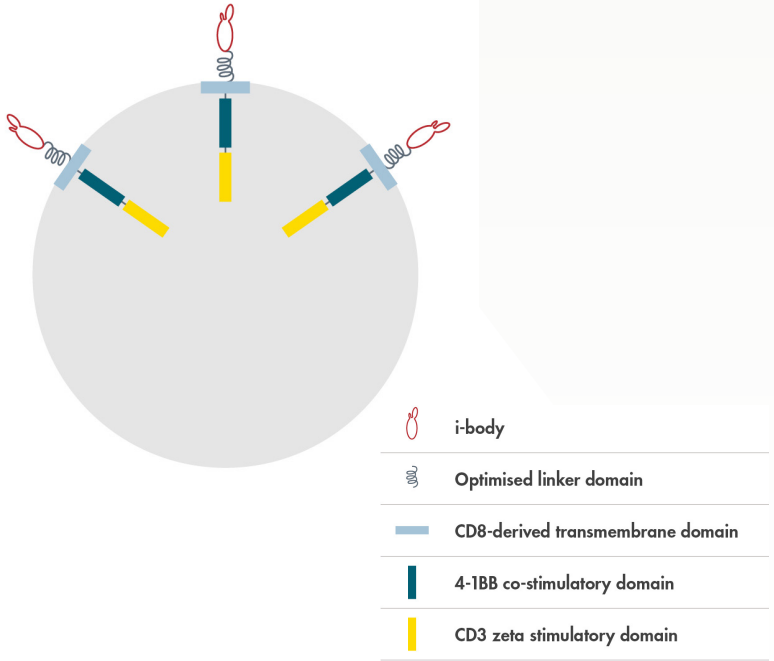
Tumour secretes molecules that suppress immune cell activity

carina biotech

Best practice manufacturing process (9 days, 90% efficiency) and Chemokine Receptor Platform make more robust, resilient CAR-T cells

i-bodies in CAR-T format

- **i-bodies are approximately half the size of the traditional CAR binding domain**
  - Enables greater flexibility in CAR design
  - Ideally suited to bispecific CARs
- **i-bodies are specifically designed to target antigens considered difficult or intractable for traditional antibodies and CAR constructs**
- ***In vitro* proof of principle established for i-bodies in a CAR-T platform (in collaboration with Carina Biotech)**

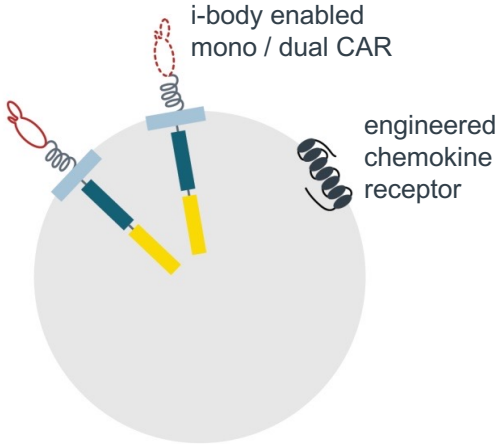


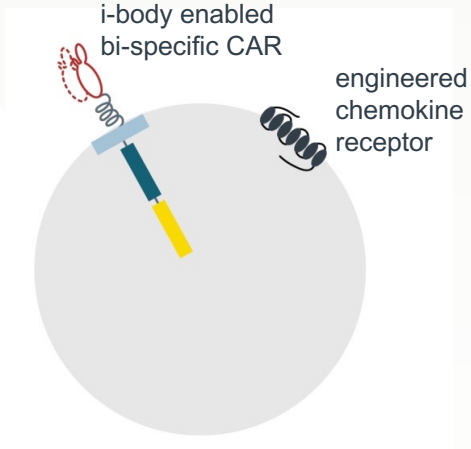
Advantages of i-body enabled CAR-T

i-body enabled CAR-T cells may demonstrate improved precision, performance and persistence, particularly in bi-specific and dual CAR-T cells

Delivering precision to difficult to treat cancers: bi-specific and dual-specific CAR-T cells

- ✓ Targets 2 antigens on cancer cells
- ✓ Reduces opportunity for tumour cells to be missed
- ✓ Reduces chance of damaging healthy tissue





i-body | Optimised linker domain | CD8-derived transmembrane domain | 4-1BB co-stimulatory domain | CD3 zeta stimulatory domain