cynata therapeutics

A Next Generation Stem Cell Therapeutics Company

Managing Director's Presentation

Dr Kilian Kelly

Annual General Meeting

13 November 2023

cynata therapeutics

Important information

Summary information
This Presentation contains summary information about Cynata Therapeutics Limited and its subsidiaries (**CYP**) which is current as at 9 November 2023. This Presentation should be read in conjunction with CYP's other periodic and continuous disclosure information lodged with the Australian Securities Exchange (**ASX**), which are available at www.asx.com.au.

Not an offer
This Presentation is not a prospectus, product disclosure statement or other offering document under Australian law (and will not be lodged with the ASIC) or any other law. This Presentation is for information purposes only and is not an invitation or offer of securities for subscription, purchase or sale in any jurisdiction. The release, publication or distribution of this Presentation (including an electronic copy) outside Australia may be restricted by law. If you come into possession of this Presentation, you should observe such restrictions. Any non-compliance with these restrictions may contravene applicable securities laws.

Not investment advice
This Presentation does not constitute investment or financial product advice (nor tax, accounting or legal advice) or any recommendation by CYP or its advisers to acquire CYP securities. This Presentation has been prepared without taking account of any person's individual investment objectives, financial situation or particular needs. Before making an investment decision, prospective investors should consider the appropriateness of the information having regard to their own investment objectives, financial situation and needs and seek legal, accounting and taxation advice appropriate to their jurisdiction. CYP is not licensed to provide financial product advice in respect of CYP securities.

Investment risk and past performance
An investment in CYP securities is subject to known and unknown risks, some of which are beyond the control of CYP and its directors. CYP does not guarantee any particular rate of return or performance of CYP. Past performance cannot be relied upon as an indicator of (and provides no guidance as to) future CYP performance including future share price performance.

Financial data
All financial information in this Presentation is in Australian currency (A$) unless otherwise stated.
This Presentation contains historical financial information based on the Company's results for the quarter year to September 2023. This information is disclosed in the 4C report lodged with ASX on 26 October 2023. Any discrepancies between totals and sums of components in tables and figures in this Presentation are due to rounding.

Forward-looking statements
This Presentation contains certain 'forward looking statements', which can generally be identified by the use of forward looking words such as 'expect', 'anticipate', 'likely', 'intend', 'should', 'could', 'may', 'predict', 'plan', 'propose', 'will', 'believe', 'forecast', 'estimate', 'target', 'outlook', 'guidance', 'potential' and other similar expressions. The forward looking statements contained in this Presentation are not guarantees or predictions of future performance and involve known and unknown risks and uncertainties and other factors, many of which are beyond the control of CYP, its directors and management, and may involve significant elements of subjective judgment and assumptions as to future events which may or may not be correct. There can be no assurance that actual outcomes will not differ materially from these forward looking statements. A number of important factors could cause actual results or performance to differ materially from the forward looking statements. No representation or warranty, express or implied, is made as to the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in this Presentation. The forward looking statements are based on information available to CYP as at the date of this Presentation. Except as required by law or regulation (including the ASX Listing Rules), CYP and its directors, officers, employees, advisers, agents and intermediaries undertake no obligation to provide any additional or updated information whether as a result of new information, future events or results or otherwise. You are strongly cautioned not to place undue reliance on forward-looking statements, particularly in light of the current economic climate and the significant volatility, uncertainty and disruption caused by the outbreak of COVID-19.

Industry and Market data
Certain market and industry data used in connection with this Presentation may have been obtained from research, surveys or studies conducted by third parties, including industry or general publications. Neither CYP nor its representatives have independently verified any such market or industry data provided by third parties or industry or general publications.

Disclaimer
To the maximum extent permitted by law, CYP and its advisers, affiliates, related bodies corporate, directors, officers, partners, employees and agents (**Related Persons**) exclude and disclaim all liability, including without limitation for negligence, for any expenses, losses, damages or costs arising from this Presentation or reliance on anything contained in or omitted from it. To the maximum extent permitted by law, CYP and its Related Persons make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of information in this Presentation and disclaim any obligation or undertaking to release any update or revision to the information in this Presentation to reflect any change in expectations or assumptions.

Statements made in this Presentation are made only as at the date of this Presentation. The information in this Presentation remains subject to change without notice.

Company highlights

Cynata is a clinical stage biotech developing its proprietary Cymerus platform technology for the scalable manufacture of mesenchymal stem cell (MSC) therapeutic products to treat serious disorders

Unique Manufacturing

Single donation from a single donor
iPSC strategy overcomes suboptimalities in conventional MSC manufacturing

Strong safety and efficacy

Positive pre-clinical and clinical data supporting versatility and efficacy of Cynata's MSCs; including in world-first iPSC trial in aGvHD Phase 1

Multiple clinical trials

Rich clinical pipeline:

- **aGvHD** (Phase 2)
- **DFU** (Phase 1)
- **Osteoarthritis** (Phase 3)
- **Renal** (Phase 1)

Large addressable market

Combined market opportunity of clinical trials underway and in planning is **~US$28bn**[1]

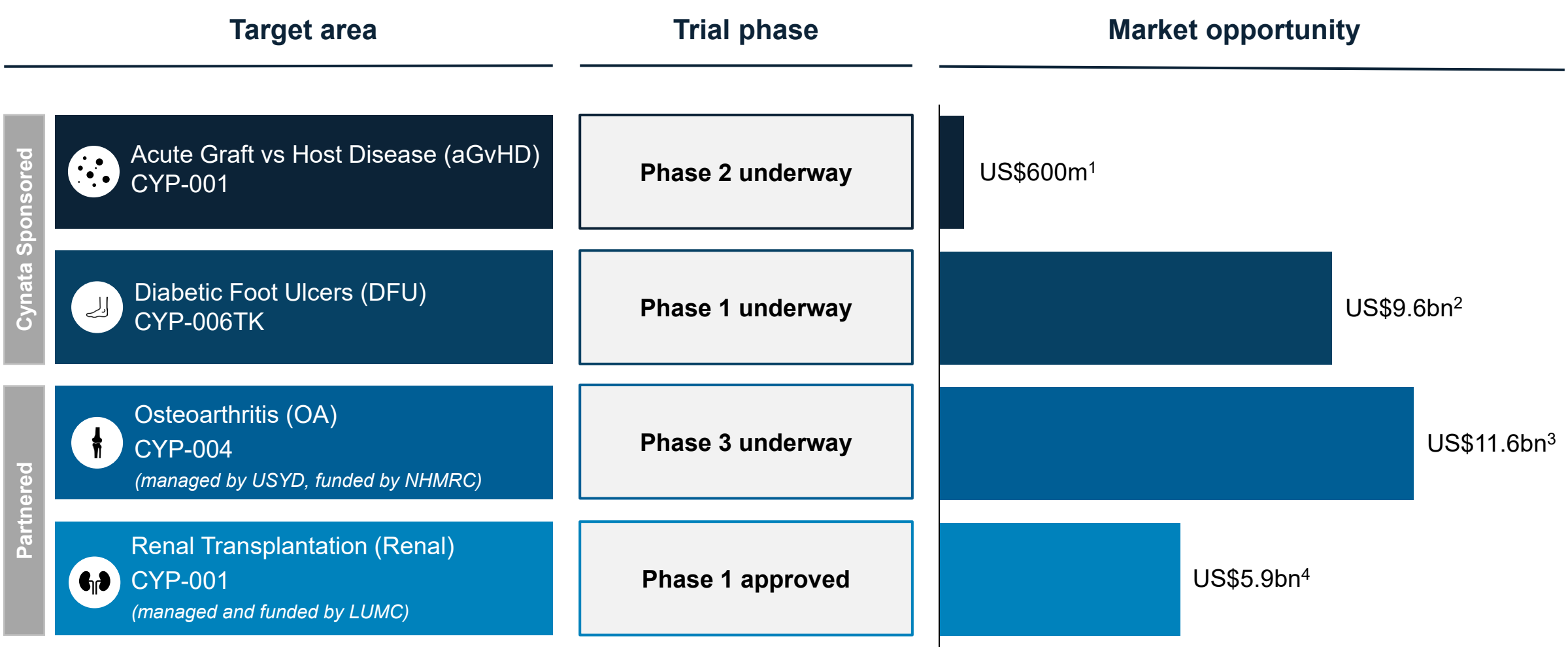
Well funded

Solid funding position, with **~A$12m in cash**[2], and OA and renal trials **funded by external partners**

cynata therapeutics

1. Refer to next slide
2. Cash as at 30 September 2023

Cynata has an advanced and diverse clinical pipeline

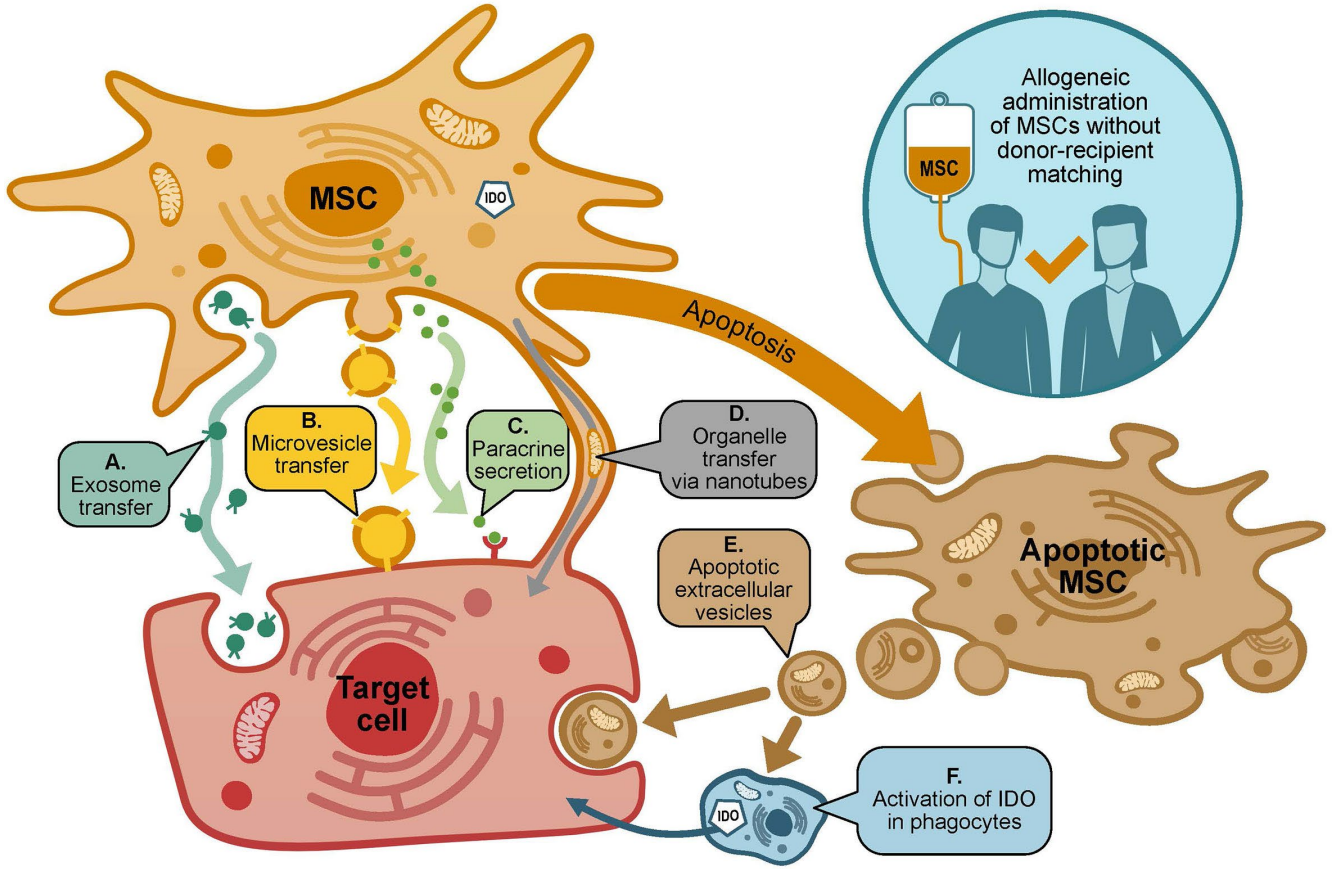


1. Global Graft versus Host Disease Market 2019-2029 (Reflects forecast market in 2026); 2. Zion Market Research, 2019 (represents global treatment market in 2025); 3. Persistence Market Research 2018 research report: "Osteoarthritis Treatment Market: Global Industry Analysis (2012-2016) and Forecast (2017-2025) (Reflect OA market by 2025); 4. Organ Transplant Immunosuppressant Drugs Market in 2026, Grand View Research, Inc.,2019
USYD = University of Sydney; NHMRC = National Health and Medical Research Council; LUMC = Leiden University Medical Center

Why Mesenchymal Stem Cells (MSCs)?

MSCs play a central co-ordinating role in many of the body's mechanisms of defence, repair and regeneration: the "sensor and switcher of the immune system"[1]

MSCs can be used therapeutically without matching the donor and the recipient



*MSCs promote an **immunomodulatory** and **immunoregulatory** environment via multifactorial mechanisms, including secretion of proteins / peptides / hormones; transfer of mitochondria; and transfer of exosomes or microvesicles containing RNA and other molecules*

cynata therapeutics

1. Aggarwal S, et al. Blood. 2005;105(4):1815-1822
Illustration from: Kelly K and Rasko J. Frontiers in Immunology. 12 October 2021

cynata therapeutics

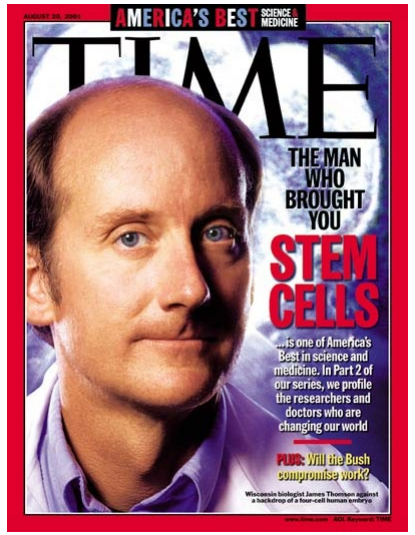
Manufacturing

Cynata's process utilizes induced pluripotent stem cells (iPSCs)

- iPSCs are mature cells from adult donors that are reprogrammed to be capable of:
  - effectively limitless proliferation in cell culture
  - differentiation into any adult cell type (including MSCs)

Thus **an ideal** starting material for cellular production processes

- iPSCs are derived from adult cells, avoiding ethical controversy associated with embryonic stem cells
- Cynata is the most advanced company worldwide developing iPSC-derived cell therapies
- Generation of human iPSCs first reported by two independent groups almost simultaneously:
  - Shinya Yamanaka, Kyoto University (awarded Nobel Prize in 2012)
  - James Thomson, University of Wisconsin-Madison



Cymerus™ iPSC-based manufacturing process

Conventional process

Major challenges include inter-donor variability and functional changes during MSC expansion

Cells donated → **Conventional process** → **MSCs**

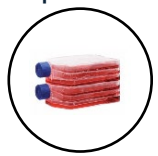
Cells from multiple donors

Substantial variability in starting material

MSC isolation

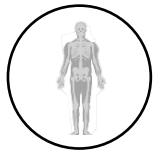
Limited quantity of MSCs obtained per donation

MSC culture expansion



Large number of MSCs required – **extensive** culture expansion

Final product



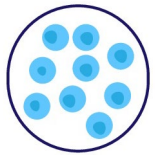
Cynata's Cymerus™ iPSC-based process

Avoids inter-donor variability and need for extensive MSC expansion

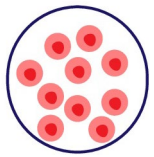
Donation and iPSC production → **Cynata's patented process: Cymerus™** → **MSCs**

Cells from **one** donor

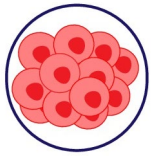
iPSC expansion



Differentiation into MSCs



MSC culture expansion



Final product

Avoids inter-donor variability

Effectively **limitless** expansion

Minimal MSC culture expansion

iPSC: induced Pluripotent Stem Cell

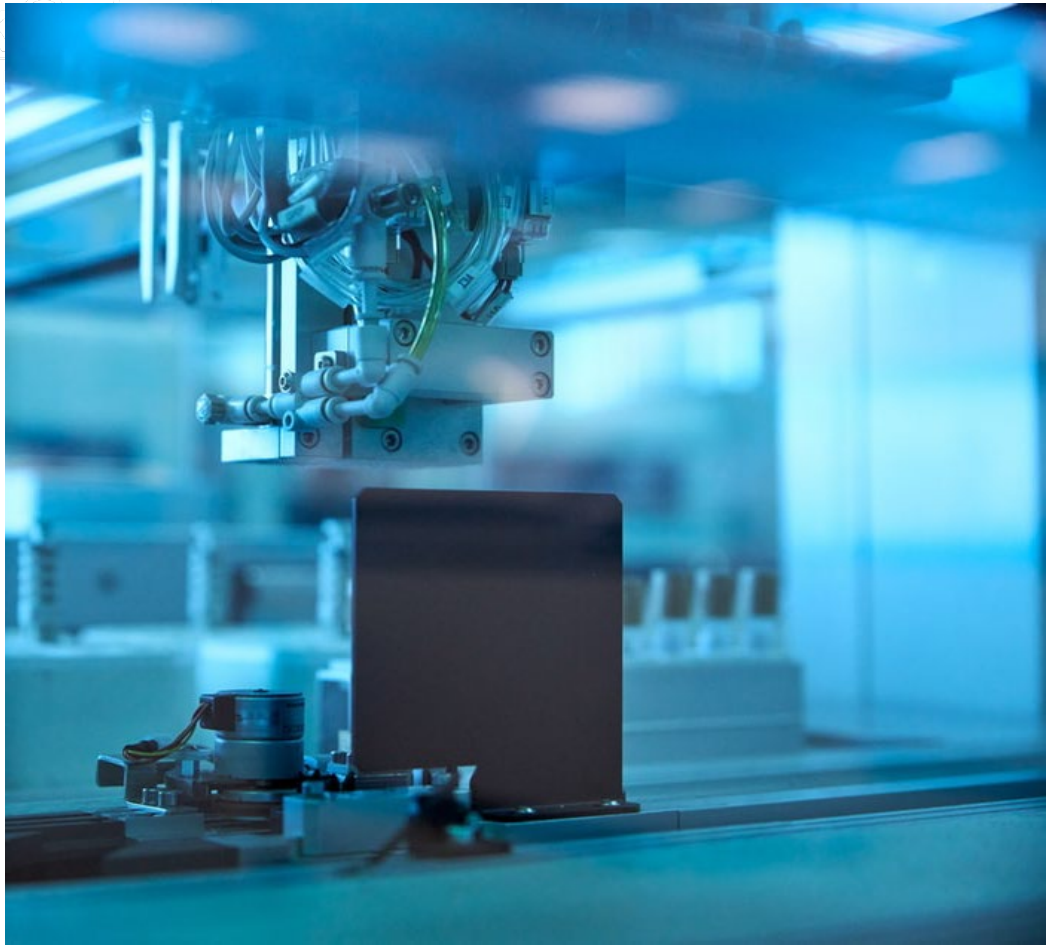
Strategic partnership with Fujifilm provides commercial benefits

Cynata executed a Strategic Partnership Agreement with Fujifilm, with Fujifilm involved in the path to market[1]

Strategic benefits for Cynata

- ✓ Fujifilm is one of the largest conglomerates in the world with a significant network and assets in the biotechnology space and recent multi-billion dollar investments in expanding its business as a comprehensive healthcare company
- ✓ Fujifilm Cellular Dynamics Inc (FCDI: subsidiary of Fujifilm) developed the original iPSC line used in Cynata's Cymerus manufacturing process
- ✓ Parties now working towards establishing Cymerus manufacturing process at FCDI with Cynata's progress showcasing Fujifilm's iPSC platform
- ✓ Significant institutional shareholder; representing a 4.5% shareholding

FUJIFILM
Value from Innovation



SPA: Strategic Partnership Agreement

1. Refer to announcement on 30 September 2021 "Cynata Enters into a New Strategic Partnership with Fujifilm".

cynata therapeutics

Preclinical Data

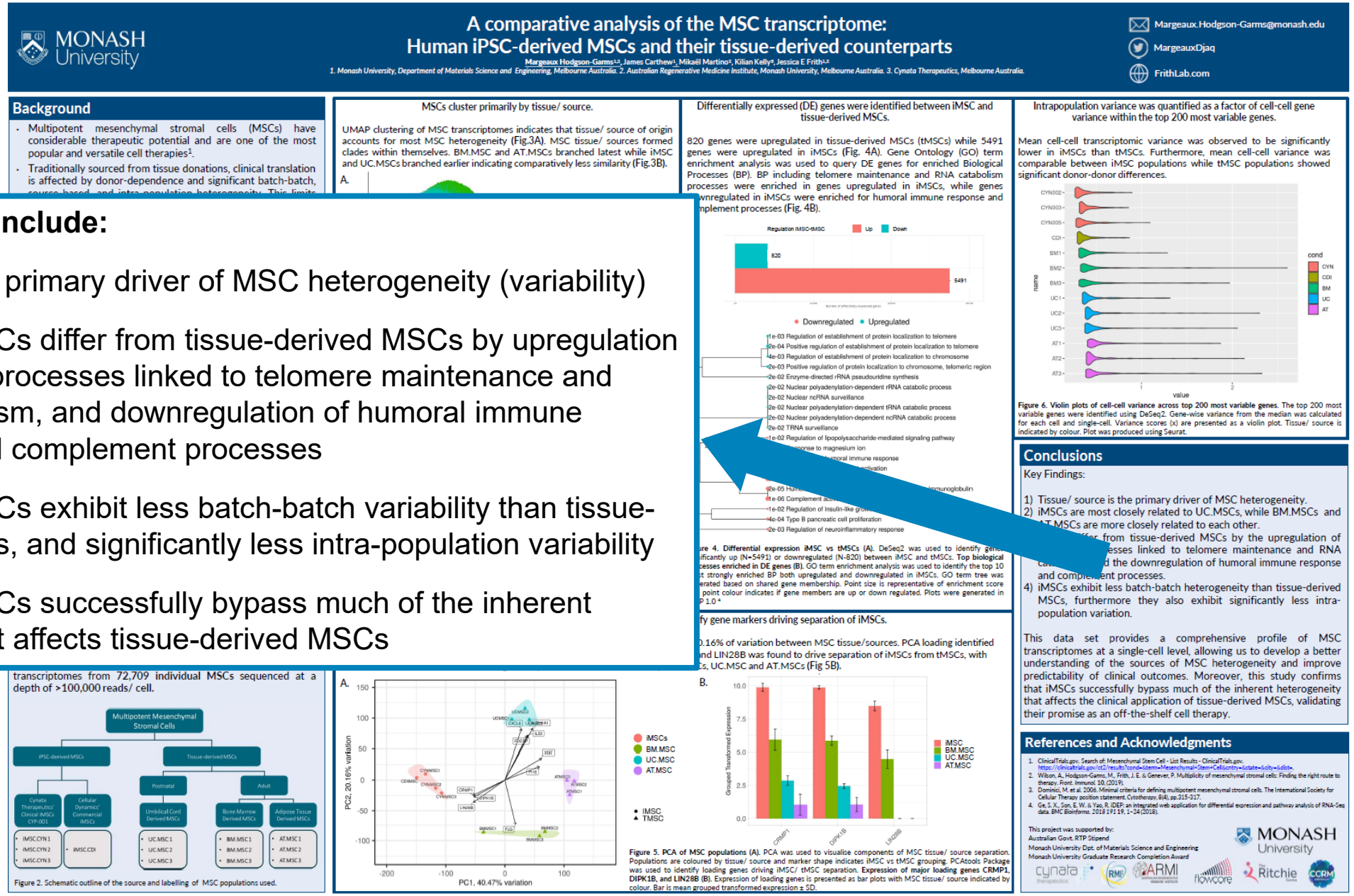
Cymerus MSCs: Completed Preclinical Studies

Indication	Partner	Key highlights	References
Graft versus Host Disease	University of Massachusetts Amherst	Cymerus MSCs attenuated disease severity and prolonged survival in a humanised mouse model of GvHD	Ozay et al, Stem Cell Res 2019;35:101401
Diabetic Wounds	Cell Therapy Manufacturing Cooperative Research Centre	Novel wound dressing seeded with Cymerus MSCs led to significantly improved wound healing in mouse model	
Osteoarthritis	The University of Sydney	Cymerus MSCs reduced pain as measured by tactile allodynia in mouse model of OA	
Organ Transplantation		Cymerus MSCs upregulated Tregs, IL-5, IL-10, and IL-15, which augmented graft microvascular blood flow and oxygenation, and maintained healthy graft and prevented subepithelial collagen deposition	Khan et al, Stem Cell Research & Therapy 2019;10:290
Critical Limb Ischaemia	Wisconsin University of Wisconsin–Madison	Cymerus MSCs improved limb blood flow and reduced necrosis and cellular damage, while maintaining muscle mass and gross muscle appearance, in mouse model	Koch et al, Cytotherapy 2016;18:219–228
Acute Respiratory Distress Syndrome	Critical Care Research Group	Cymerus MSCs reduced lung injury. inflammation and circumstances leading to circulatory shock in sheep model	Millar et al, Am J Crit Care Med 2020;202(3):383-392
Myocardial infarction	The University of Sydney	Cymerus MSCs reduced left ventricular end-systolic diameter compared to placebo and bone marrow (BM)-MSCs. Cymerus MSCs (but not BM-MSCs) enhanced arteriogenesis in peri-infarct zone. Expression of a number of cytokines by Cymerus MSCs was 2-to 4-fold higher than BM-MSCs	Thavapalachandran et al, Cytotherapy 2021;23(12):1074-1084
Coronary Artery Disease	UNSW Sydney	Modification of cell culture matrix primes Cymerus MSCs and enhances their pro-angiogenic and immunomodulatory properties	Romanazzo et al, J Tissue Eng Regen Med 2022;16(11):1008-1018
Glioblastoma	HSCI Harvard Stem Cell Institute	Cymerus platform successfully engineered to express transgenes in a stable manner; engineered Cymerus MSCs reduce viability of human glioblastoma cells, and slowed tumour progression in mouse model	
Asthma	Monash University	Cymerus MSCs demonstrated significant beneficial effects on three key components of asthma: airway hyper-responsiveness, inflammation and airway remodelling	Royce et al. FASEB J 2017;31(9): 4168-4178; Royce et al. FASEB J 2019:33(5):6402-6411
Idiopathic pulmonary fibrosis	Monash University	Cymerus MSCs improved dynamic lung compliance, airway resistance, interstitial lung inflammation, fibrosis and epithelial and sub-epithelial thickness	
Cytokine Release Syndrome	University of Massachusetts Amherst	Cymerus MSCs significantly ameliorated the effects of Cytokine Release Syndrome, a potentially severe and life-threatening adverse reaction to cancer immunotherapy	
Sepsis	RCSI	Cymerus MSCs increased blood oxygen levels and respiratory static compliance, and reduced alveolar neutrophil infiltration, barrier permeability and inflammation	

MSCs from different sources have different properties

Key Findings include:

- Source is the primary driver of MSC heterogeneity (variability)
- Cymerus MSCs differ from tissue-derived MSCs by upregulation of biological processes linked to telomere maintenance and RNA catabolism, and downregulation of humoral immune response and complement processes
- Cymerus MSCs exhibit less batch-batch variability than tissue-derived MSCs, and significantly less intra-population variability
- Cymerus MSCs successfully bypass much of the inherent variability that affects tissue-derived MSCs



MSC source also influences performance in preclinical models

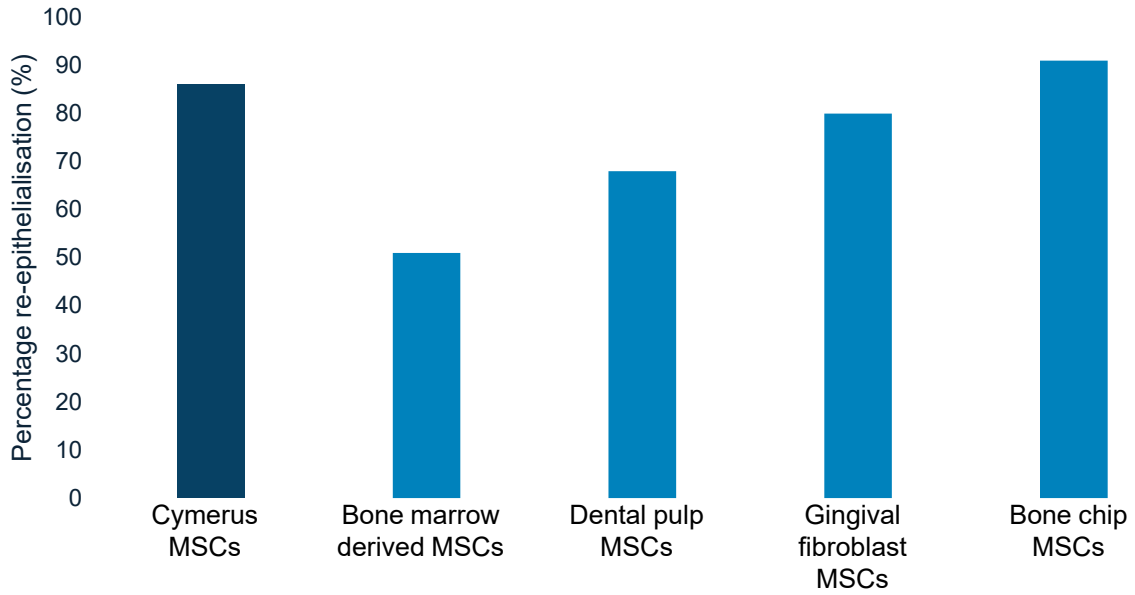
Pre-clinical rat model of myocardial ischemia-reperfusion (heart attack)[1]

Positive effects were observed with both Cymerus MSCs and bone marrow MSCs, but some effects were different between the two MSC groups:

- Left ventricle function was significantly improved in Cymerus MSC group (P=0.01) compared to placebo controls, but not in bone marrow MSC group (P=0.63)
- Arteriogenesis (formation of new arteries) around the infarct zone was significantly improved in Cymerus MSC group compared to both placebo controls and bone marrow MSC group (P=0.01)
- Expression of a number of relevant cytokines by Cymerus MSCs was **2-4x higher** than by bone marrow MSCs

1. Thavapalachandran et al. Pluripotent stem cell-derived mesenchymal stromal cells improve cardiac function and vascularity after myocardial infarction. Cytotherapy 2021;23(12):1074-1084

Preclinical mouse model of diabetic wounds, using novel MSC-seeded dressing



- Cymerus MSCs resulted in significantly greater re-epithelialisation (86%) compared with bone marrow MSCs (51%)
- Although gingival fibroblast and bone chip MSCs produced similar results, there are major challenges associated with producing clinical-grade cells from those sources

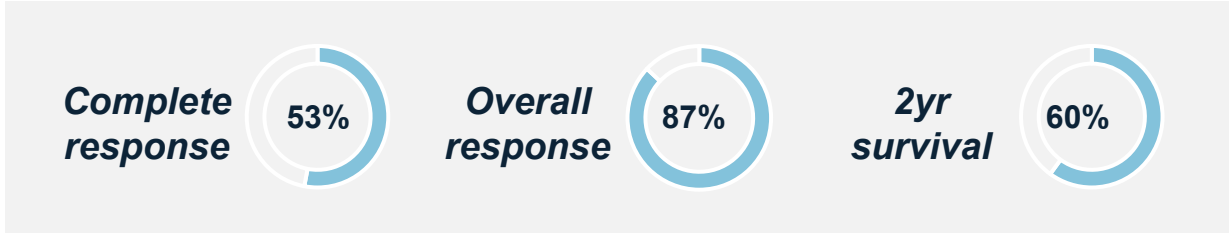
cynata therapeutics

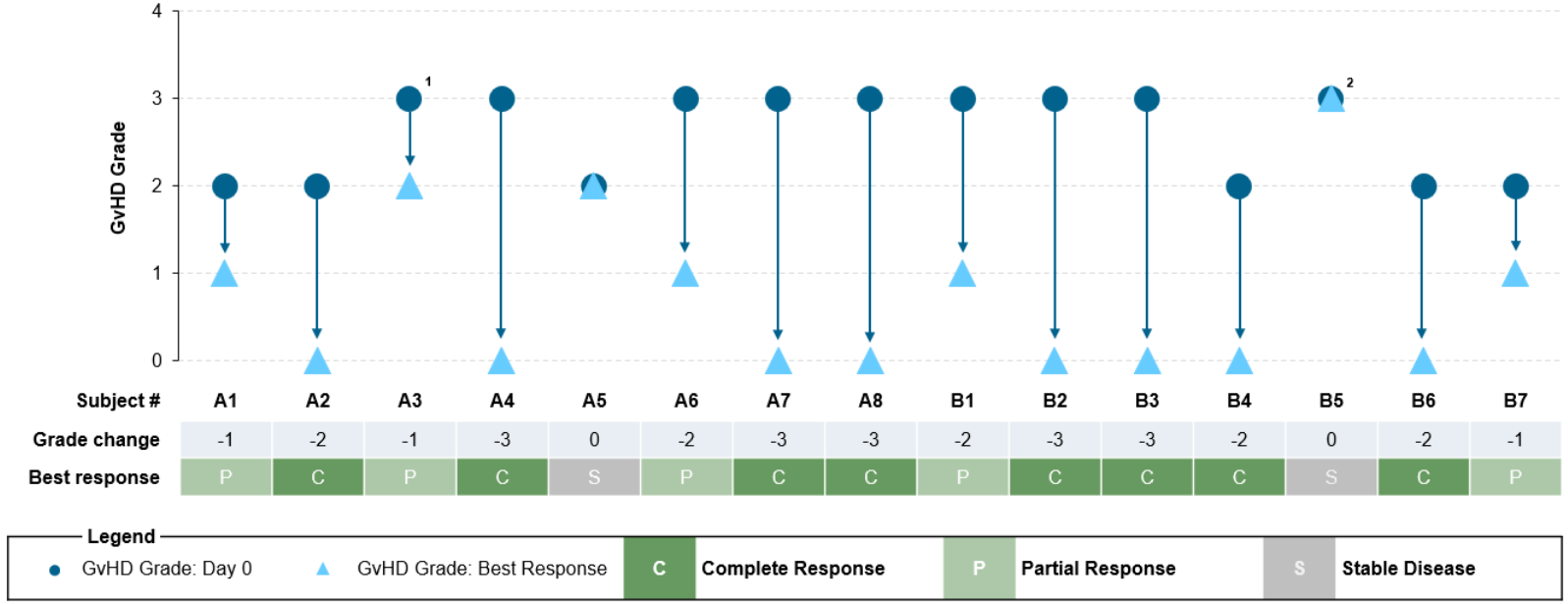
cynata therapeutics

Clinical Trials

aGvHD | Phase 1 clinical trial (completed)

The first completed clinical trial of an iPSC-derived product





No treatment-related serious adverse events or safety concerns identified

Published in Nature Medicine[3]

- Subjects received $1x10^6$ cells/kg (max $1x10^8$ cells) or $2x10^6$ cells/kg (max $2x10^8$ cells) by IV infusion on D0 and D7
- Eight subjects were enrolled in each cohort, but one subject in Cohort B withdrew prior to infusion of CYP-001

1. Subject A3 showed a PR at Days 14 and 21 but died due to pneumonia on Day 28; 2. Subject B5 withdrew from the trial on Day 22 to commence palliative care

3. Bloor et al. Production, safety and efficacy of iPSC-derived mesenchymal stromal cells in acute steroid-resistant graft versus host disease: a phase I, multicenter, open-label, dose-escalation study. Nat Med 2020;26:1720-1725.

cynata therapeutics

aGvHD | Phase 2 clinical trial

Product	• CYP-001 (Cymerus™ iPSC-derived MSCs for intravenous infusion)
Indication	• Acute graft versus host disease (aGvHD) may occur after bone marrow transplantation and similar procedures, due to donor immune cells (from the “graft”) attacking the transplant recipient (the “host”)
Trial Details	• Randomised controlled trial in ~60 patients with High Risk aGvHD • Clinical sites in USA, Europe and Australia • Primary objective: to assess efficacy of CYP-001 based on Overall Response Rate at Day 28
Start-up	• Regulatory/ethics approvals secured in Australia and USA; European regulatory process ongoing • Site startup activities ongoing
Recruitment	• Commenced August 2023 • Anticipate 5-6 sites open for recruitment by end CY 2023, with remainder to open in 2024 (staggered opening of sites has already been factored into recruitment projections) • Aiming to complete recruitment by end CY 2024
Results	• Aiming to report primary evaluation results in 2H CY 2025

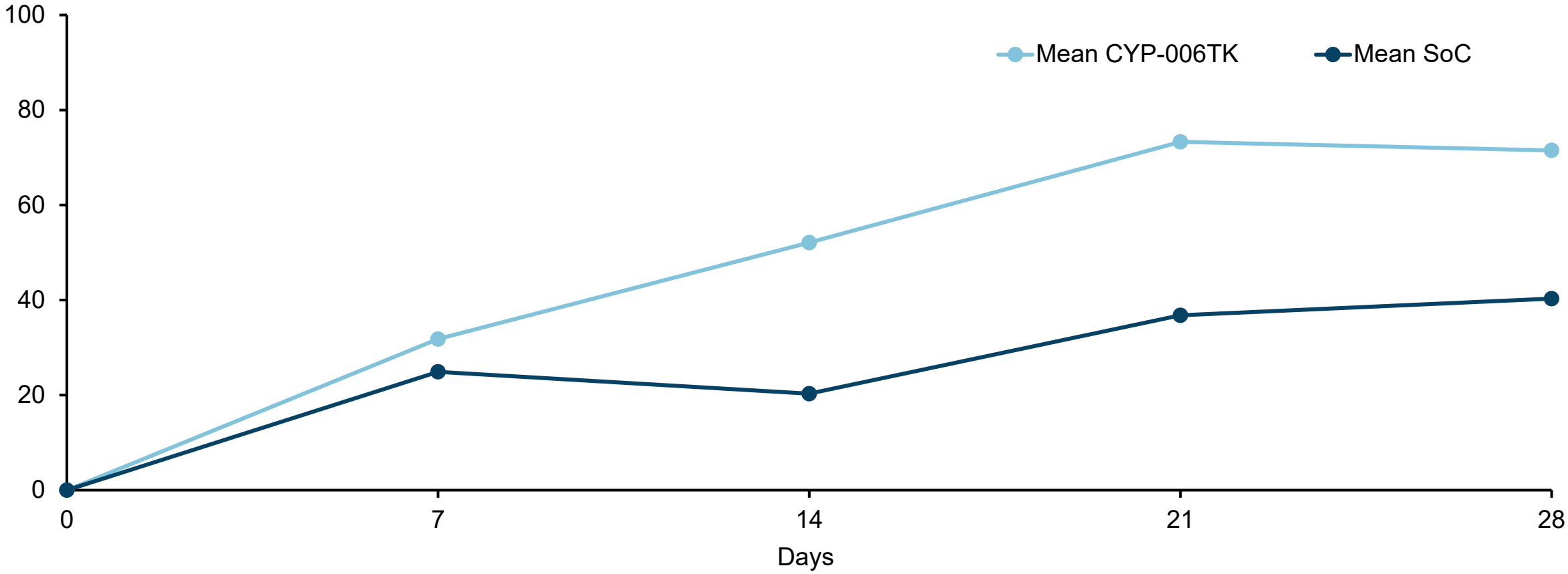
DFU | Phase 1 clinical trial

Product	• CYP-006TK (Novel silicone dressing seeded with Cymerus™ iPSC-derived MSCs)
Indication	• Diabetic Foot Ulcers (DFU) are wounds on the feet of patients with diabetes
Trial Details	• Randomised controlled trial in ~30 patients with DFU • Clinical sites in Australia (Adelaide and Perth) • Primary objective is safety; efficacy outcome measures include wound healing, pain & quality of life
Start-up	• Complete
Recruitment	• Commenced March 2022 • Additional sites added earlier in 2023 to increase recruitment rate; ~threefold increase in recruitment rate in current financial year • Aiming to conclude recruitment by end CY 2023
Results	• Positive initial results from first 6 patients reported in 2023 (see next slide) • Aiming to report initial results from full dataset in mid CY 2024

DFU | CYP-006TK initial treatment data

Great ulcer surface area healed in CYP-006TK group compared to standard of care (SoC)

Mean % ulcer surface area healed over time (%)[1]; n=6 (3 in each group)



1. Mean defined as average ulcer surface area healed for participants in each trial group

OA | Phase 3 clinical trial[1]

Product	• CYP-004 (Cymerus™ iPSC-derived MSCs for intra-articular injection)
Indication	• Osteoarthritis (OA) occurs when the cartilage in a joint wears away. It causes pain, inflammation, swelling and difficulty with movement.
Trial Details	• Trial conducted by University of Sydney, funded by Australian Government National Health and Medical Research Council (NHMRC) grant • Randomised, double-blind placebo-controlled trial in ~320 patients with OA of the knee • Each participant receives 3 injections over 12 months; follow-up of 24 months from first dose • Co-primary endpoints: reduction of knee symptoms and measure of cartilage loss
Start-up	• Complete
Recruitment	• Commenced November 2020 • Target sample size has been reached; recruitment expected to close in November 2023
Results	• Primary evaluation results expected to be received in H1 CY 2026

cynata therapeutics

1. Clinical trial entitled Stem Cells as a symptom – and strUcture-modifying Treatment for medial tibiofemoral OsteoaRthritis: a randomised placebo-controlled trial (SCUlpTOR).

Renal transplantation | Phase 1 clinical trial

Product	• CYP-001 (Cymerus™ iPSC-derived MSCs for intravenous infusion)
Indication	• Current standard of care after kidney transplantation involves long-term requirement for anti-rejection drugs, which often cause serious toxicities
Trial Details	• Trial to be conducted and funded by Leiden University Medical Center, Netherlands • 16 renal transplant patients to receive Cymerus MSCs after transplantation: cohort 1 (n=3); cohort 2 (n=3); cohort 3 (n=10) • Trial will evaluate safety (all cohorts) and efficacy of MSCs in facilitating reduction of anti-rejection medication (Cohort 3)
Start-up	• Regulatory approval in place • Final trial start-up activities ongoing
Recruitment	• Aiming to commence in Q1 2024 • Aiming to complete recruitment of Cohort 1 in Q2 2024 • Timing of further cohorts TBC
Results	• Results of Cohort 1 anticipated in late 2024/early 2025

cynata therapeutics

Corporate Information

Board & Senior Management

Highly skilled and experienced senior leadership team with decades of experience

Dr Kilian Kelly

Chief Executive Officer &
Managing Director

- 20+ years' experience in biopharma R&D
- Previous roles at Biota Pharmaceuticals, Mesoblast, Amgen & AstraZeneca

Dr Geoff Brooke

Independent Non-Executive Chair

- 30+ years' experience in the healthcare investment industry
- Founder and MD of Medvest Inc and GBS Venture Partners

Dr Paul Wotton

Independent Non-Executive Director

- 30+ years' experience in senior positions of life sciences companies
- Previously President and CEO of Ocata Therapeutics, Inc

Ms Janine Rolfe

Independent Non-Executive Director

- 20+ years legal, governance and management experience across multiple sectors
- Founder of Company Matters

Dr Darryl Maher

Independent Non-Executive Director

- Former Vice President, R&D and Medical Affairs at CSL Behring
- Former President of Australian Pharmaceutical Physicians Association and Director of Vaccine Solutions

Dr Jolanta Airey

Chief Medical Officer

- 25+ years' experience in respiratory, rheumatology, dermatology, biologicals and listed companies
- Previously Director, Translational Development at CSL

Mr Peter Webse

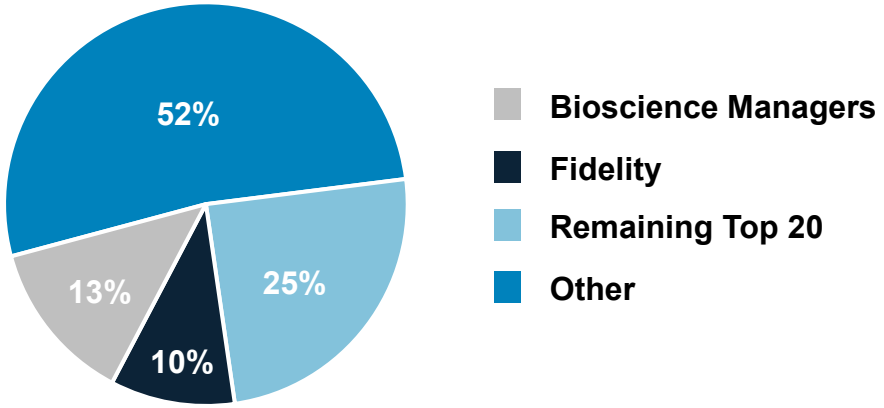
Company Secretary

- 25+ years company secretarial experience
- Director of Governance Corporate Pty Ltd

Corporate overview

Cynata has been listed on the Australian Securities Exchange (ASX) since 2013 (Ticker: CYP)

Shareholder distribution



Financial information

Share price (9 November 2023)	A$0.135
Shares on issue	179m
Market capitalisation	**~A$24m**
Cash[1]	~A$12m

Substantial shareholders (>5%)

BioScience Managers — **13.1%**

Bioscience Managers is an international healthcare investment firm headquarter in Melbourne that finances and enables innovative science and technology with the potential to transform healthcare.

Fidelity INTERNATIONAL — **10.0%**

Fidelity International is a world leading investment and asset management firm that invests A$556.7 billion globally on behalf of clients in Asia-Pacific, UK, Europe, the Middle East and South America.

cynata therapeutics

Source: IRESS
1. As at 30 September 2023

Investment summary

Next generation stem cell company	• Leading technology in burgeoning stem cell sector • Diverse and highly credentialed leadership team with proven clinical and commercial experience across a range of health sciences at leading institutions
Scalable manufacturing process	• Patented Cymerus manufacturing technology enables commercial-scale production of MSCs from a single donation from a single donor, overcoming multiple issues with conventional approaches • Cymerus MSCs have demonstrated higher potency versus conventionally manufactured MSCs
Successful clinical trial results	• Very encouraging safety and efficacy results from Phase 1 trial of Cymerus MSCs in aGvHD • Highly encouraging initial DFU patient data
Robust and attractive pipeline	• Broad and diverse clinical stage MSC pipeline with active clinical programs in aGvHD, DFU, OA, and renal transplantation • FDA cleared IND for Phase 2 aGvHD clinical trial; study open for recruitment
Significant growth potential	• Pipeline has significant commercial opportunities: global estimated market opportunity across targeted indications of ~US$28bn • Continued focus on indications where there is significant unmet need • Proactive B-2-B outreach to drive partnering strategy

Contact Us

Cynata Therapeutics Limited
Level 3
100 Cubitt Street
Cremorne
Victoria 3121
Australia

Contact details:

info@cynata.com

www.cynata.com