



# A Next Generation Stem Cell Company

Investor Presentation  
Cynata Therapeutics Limited  
April 2018

# Important Information

This presentation has been prepared by Cynata Therapeutics Limited. ("Cynata" or the "Company") based on information available to it as at the date of this presentation. The information in this presentation is provided in summary form and does not contain all information necessary to make an investment decision.

This presentation does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any security in Cynata Therapeutics, nor does it constitute financial product advice or take into account any individual's investment objectives, taxation situation, financial situation or needs. An investor must not act on the basis of any matter contained in this presentation but must make its own assessment of Cynata Therapeutics and conduct its own investigations. Before making an investment decision, investors should consider the appropriateness of the information having regard to their own objectives, financial situation and needs, and seek legal, taxation and financial advice appropriate to their jurisdiction and circumstances. Cynata Therapeutics is not licensed to provide financial product advice in respect of its securities or any other financial products. Cooling off rights do not apply to the acquisition of Cynata Therapeutics securities.

Although reasonable care has been taken to ensure that the facts stated in this presentation are accurate and that the opinions expressed are fair and reasonable, no representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, none of Cynata Therapeutics, its officers, directors, employees and agents, nor any other person, accepts any responsibility and liability for the content of this presentation including, without limitation, any liability arising from fault or negligence, for any loss arising from the use of or reliance on any of the information contained in this presentation or otherwise arising in connection with it.

The information presented in this presentation is subject to change without notice and Cynata Therapeutics does not have any responsibility or obligation to inform you of any matter arising or coming to their notice, after the date of this presentation, which may affect any matter referred to in this presentation.

The distribution of this presentation may be restricted by law and you should observe any such restrictions.

## Forward looking statements

This presentation contains certain forward looking statements that are based on the Company's management's beliefs, assumptions and expectations and on information currently available to management. Such forward looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results or performance of Cynata to be materially different from the results or performance expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding the Company's present and future business strategies and the political and economic environment in which Cynata will operate in the future, which are subject to change without notice. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward looking statements or other forecast. To the full extent permitted by law, Cynata and its directors, officers, employees, advisers, agents and intermediaries disclaim any obligation or undertaking to release any updates or revisions to information to reflect any change in any of the information contained in this presentation (including, but not limited to, any assumptions or expectations set out in the presentation).

# Investment overview

1

**Unique technology to efficiently mass-produce mesenchymal stem cells (MSCs),** a highly promising type of therapeutic stem cell

2

**World first clinical trial,** with clear early efficacy and safety data received from 1st patient cohort & providing a springboard for further clinical studies

3

**Cynata's initial target area is GvHD,** intended to prove the quality of the MSC's produced by its patented Cymerus™ platform

4

**Scalable business model** intended to target a **broad range of disease target areas** over time, and monetise these through licensing & partnerships

5

**Large, active and growing market,** with over 650 trials investigating the efficacy of MSCs in treating diseases including osteoarthritis, stroke & cardiovascular disease

6

**Monetisation of the business model has already commenced,** as license options have been entered with Fujifilm, who are Cynata's largest shareholder with 9%

7

**Strong balance sheet** with cash runway into 2019 based on current projections

# Corporate overview: A biotech company with a world-first clinical trial and leading technology platform

## Company profile

- Cynata Therapeutics is an Australian stock exchange listed clinical-stage biotechnology company developing disruptive regenerative medicines. Cynata shows strong potential for 2018, with a strategic partnership and license option agreement in place with Fujifilm

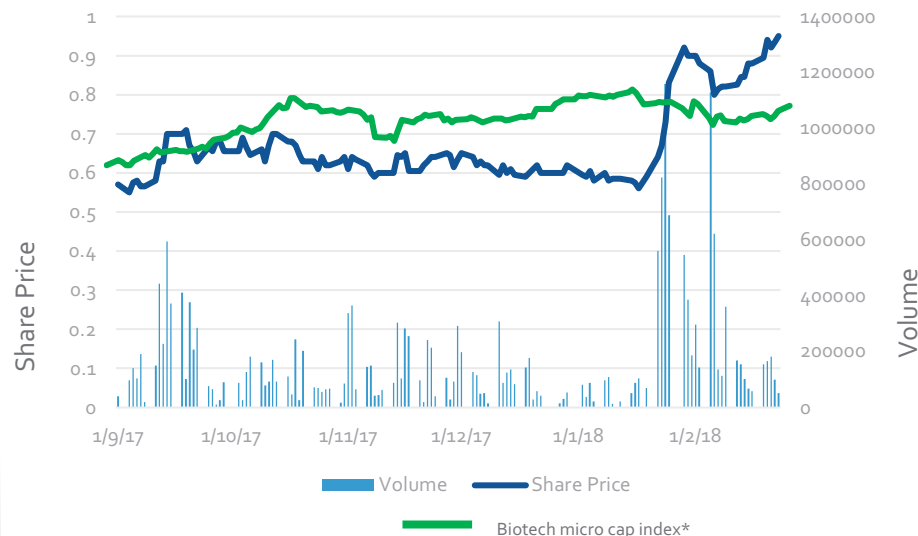
## Financial information

Share price (6 April 18)	A\$1.44
52 week low / high	A\$1.49 / A\$0.37
Shares on issue <sup>1</sup>	90.8m
<b>Market capitalisation</b>	<b>A\$131m</b>
Cash (as at 31-Dec-17)	A\$8.8m
December quarter expected cash burn	~\$2.1m
Debt (as at 30-Jun-17)	-
<b>Enterprise value</b>	<b>A\$122m</b>

Source: IRESS

Notes: Excludes 10.4m unquoted options with exercise prices ranging from \$0.40 to \$1.022 and expiry dates between 27-Sep-2018 and 4-Aug-2020, and 750k unlisted incentive options with exercise price \$0.49 and expiring 16 December 2018 (500k subject to vesting conditions)

## 6 month share price performance

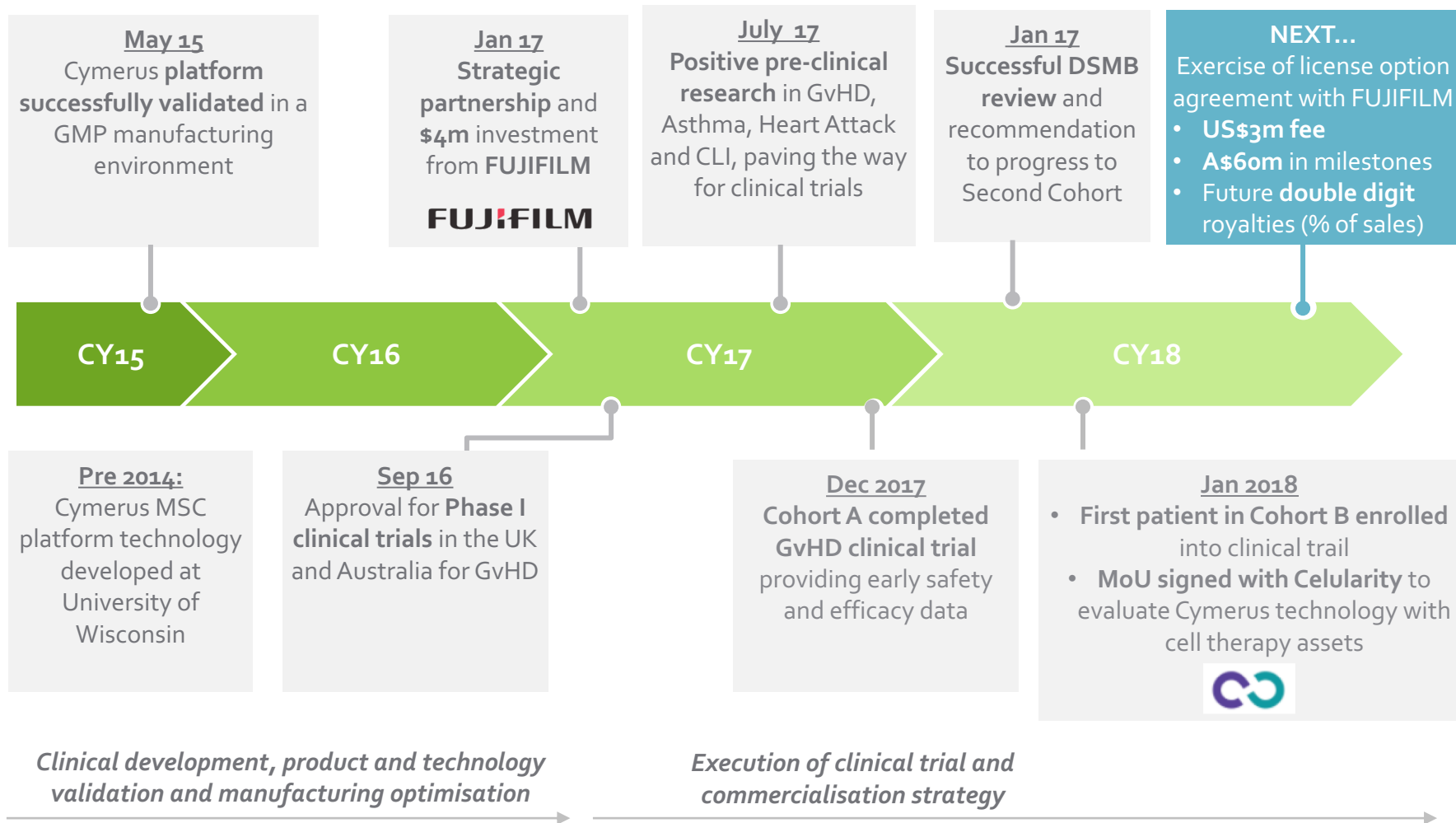


## Top Shareholders

Shareholder	%
Fujifilm corporation	8.98
Board and Management	8.12%
Number of shareholders	~2300

Notes: ASX listed peers incorporates the average share price movements of MSB, RGS, CTE, OCC, LCT over the last 6 months

# Accelerating towards trial completion



# Why MSCs?

## What are MSCs?

- Mesenchymal stem cells (MSCs) are highly potent adult stem cells found in bone marrow and certain other tissues.

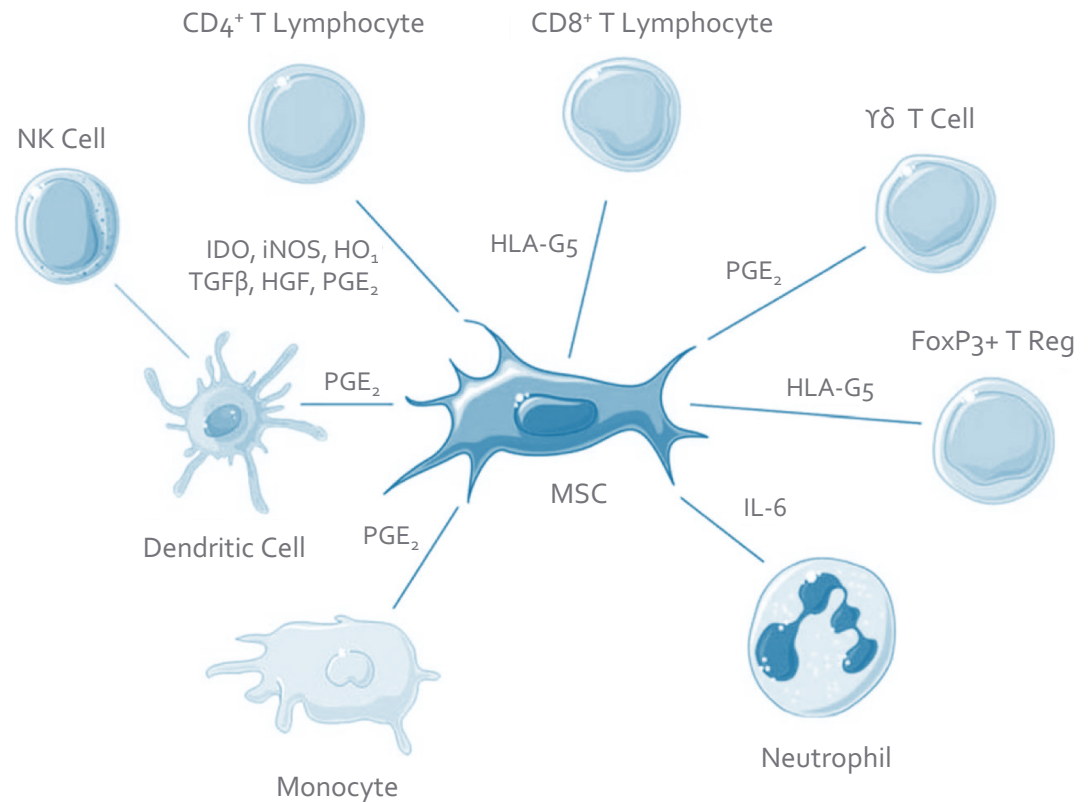
## What do they do?

- They have the ability to self renew.
- They secrete bioactive molecules and have immunosuppressive and immunoregulatory properties – giving them enormous therapeutic potential.

## How much commercial interest is there?

Over 650 clinical trials investigating the efficacy of MSCs in treating diseases have been initiated.<sup>1</sup>

Promising results have been shown in conditions such as heart attack, stroke, GvHD, Crohn's disease, multiple sclerosis, osteoarthritis and diabetes complications



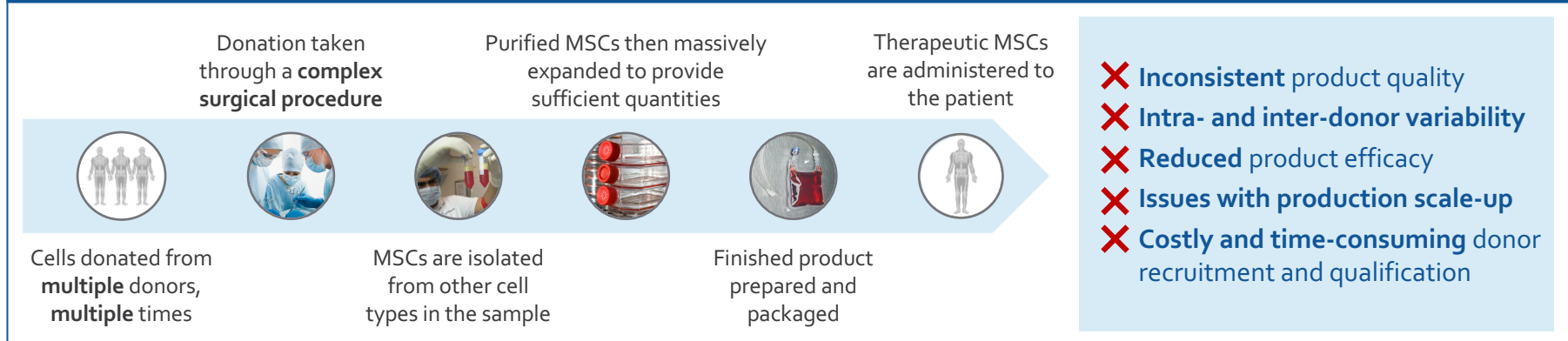
# The Current Challenge

Excessive culture expansion:  
“the most egregious  
divergence between  
[commercial and academic  
MSC products] is the scale of  
product expansion”

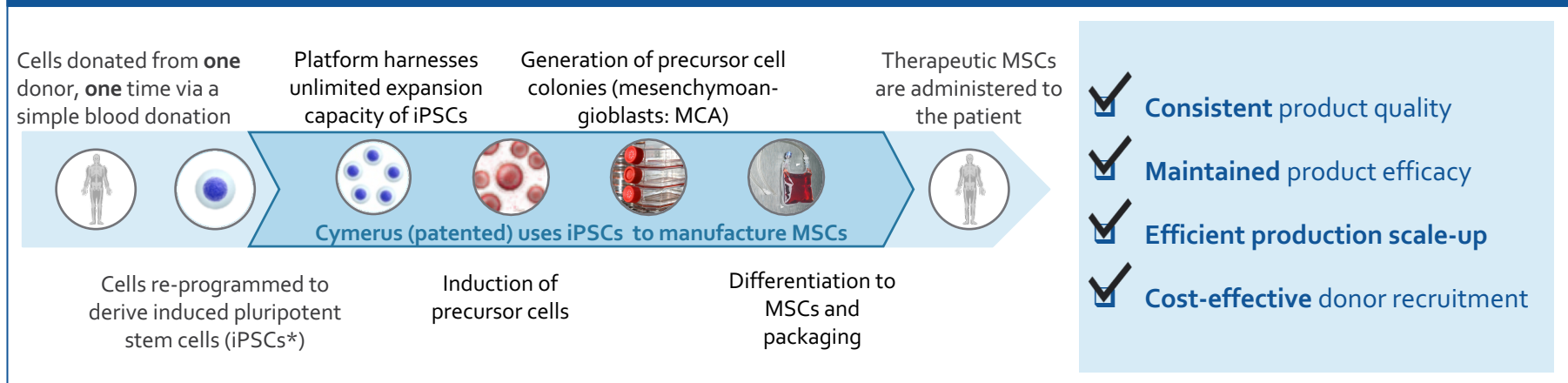
*Cynata's Cymerus platform  
solves this challenge....*

# Only company in the world with a platform to mass-produce MSCs without multiple donors

## First generation process has multiple shortcomings



## Cynata's patented Cymerus platform overcomes these challenges by using induced iPSCs that are derived from a single blood donation



\*iPSCs are derived from e.g. blood cells and have been reprogrammed back into an embryonic-like state that enables the development of an unlimited source of virtually any type of human cell."



# Regenerative medicine market growing rapidly and MSCs are a major growth driver

## How big is the market for regenerative medicine?

“Global regenerative medicine market was worth \$18.9 billion in 2016 and will grow to over \$53.7 billion by 2021<sup>1</sup>”

“Stem cells are the cornerstone of contemporary regenerative medicine applications<sup>2</sup>”

## How feasible are MSCs as a treatment?

Over 650 clinical trials investigating the efficacy of MSCs in treating diseases have been initiated.<sup>3</sup>

Promising results have been shown in conditions such as heart attack, stroke, GvHD, Crohn's disease, multiple sclerosis, osteoarthritis and diabetes complications

# Cynata is operating in a highly active market

Cell therapy is a key category and no longer an evolving market

August 2017: US FDA approved Novartis' product, Kymriah, a T cell (CAR-T) treatment for leukemia

August 2017: Gilead to acquire Kite Pharma for US\$11.9b. Kite develops similar CAR-T cell products for cancer treatment

October 2017: FDA approved Kite Pharma's product, Yescarta, a CAR-T treatment for leukemia

January 2018: Celgene moves to acquire Juno in a US\$9b transaction

March 2018: TiGenix allogeneic MSC product (Alofisel) approved in Europe

## Cord Blood Registry

Acquired by AMAG  
Pharmaceuticals Inc  
2015

USD  
700M

## Cellular Dynamics

Acquired by Fujifilm  
2015

USD  
307M

## CiRA & Takeda

partner in iPS  
Collaboration  
2015

USD  
267M

## TiGenix

To be acquired by Takeda  
2018

USD  
627M

## Ocata Therapeutics

Acquired by Astellas  
2016

USD  
379M

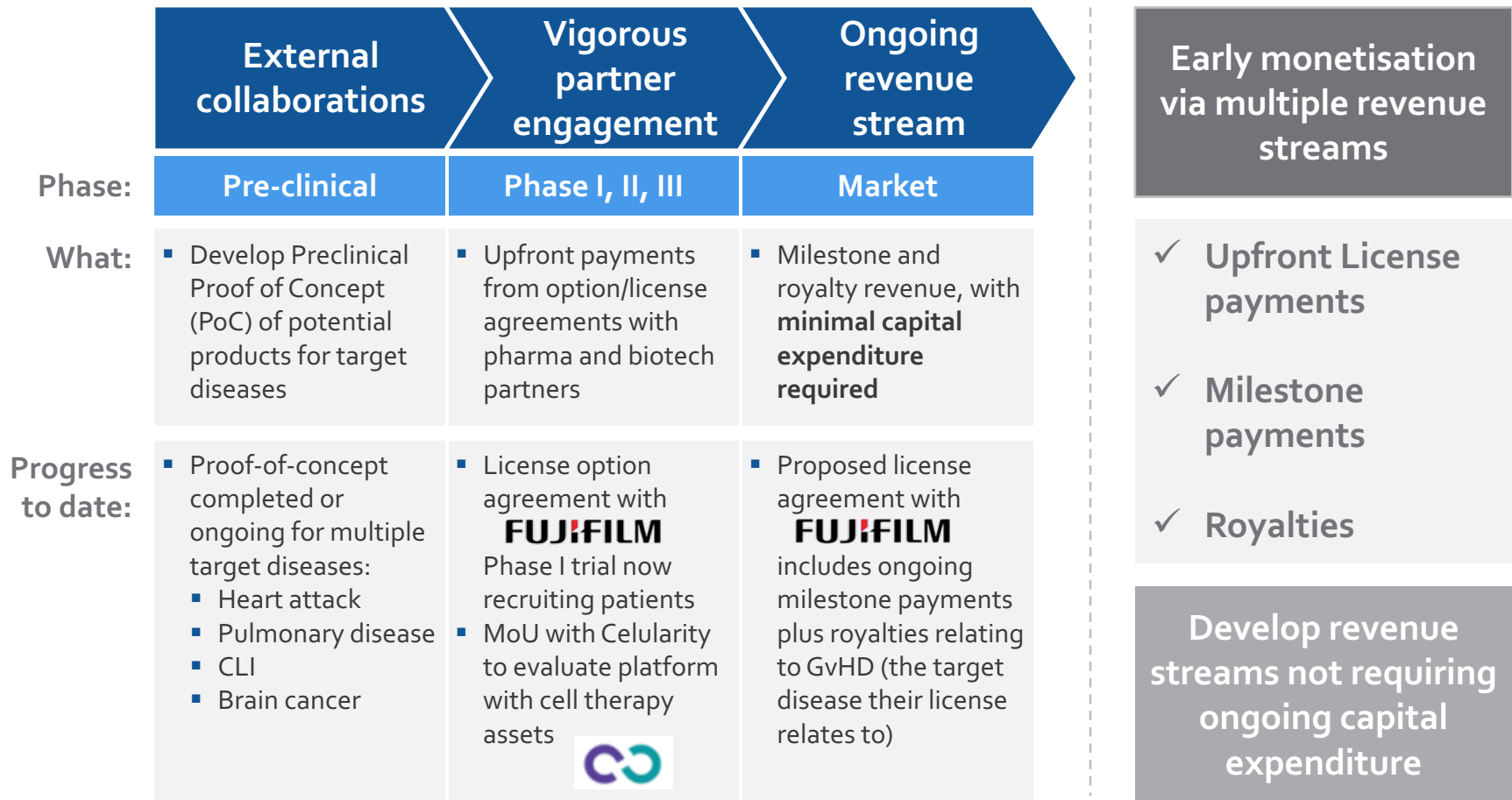
## Bayer and Versant Ventures

launched stem cell therapy  
company BlueRock  
Therapeutics  
2016







USD  
225M  
(SERIES  
A)

+ multiple license agreements over recent years

# Our platform provides a scalable business model, applicable to a broad range of disease targets



# Indications Currently Being Investigated

Disease target area	External collaborations		Vigorous partner engagement		Further revenues	Key highlights
	Pre-clinical trials started	Proof of concept completed	Deal secured	Clinical trial started	Product in-market	
<b>Graft v Host Disease (GvHD)</b> University of Massachusetts 	✓	✓	✓	✓		<ul style="list-style-type: none"> <li>Pre-clinical research with University of Massachusetts show Cymerus MSCs to be highly effective in GvHD</li> <li>Half a billion dollar market by 2021</li> </ul>
<b>Asthma</b> Monash University 	✓	✓				<ul style="list-style-type: none"> <li>Cymerus MSCs demonstrated significant beneficial effects on three key components of asthma: airway hyper-responsiveness, inflammation and airway remodeling.</li> </ul>
<b>ARDS</b> Critical care research group 	✓					<ul style="list-style-type: none"> <li>Study to commence to evaluate effectiveness of Cymerus MSCs in sheep with ARDS in association with the Prince Charles Hospital in Brisbane.</li> </ul>
<b>Heart attack</b> University of Sydney 	✓					<ul style="list-style-type: none"> <li>Pre-clinical trials suggest Cymerus MSCs may have the potential to restore cardiac function and reduce scar size after a heart attack (US\$18.2 billion market by 2019<sup>1</sup>)</li> </ul>
<b>Brain Cancer / Glioblastoma</b> Harvard/BWH 	✓					<ul style="list-style-type: none"> <li>Research collaboration in genetically modified MSCs in cancer: involves modifying stem cells to target cancer</li> </ul>
<b>Critical Limb Ischemia</b> University of Wisconsin-Madison 	✓	✓				<ul style="list-style-type: none"> <li>Pre-clinical study published in peer reviewed journal Cytotherapy, The Journal of Cell Therapy. Study found treatment with MSCs demonstrate beneficial impact on CLI.</li> </ul>

Successful outcomes open many other disease targets potentially benefiting from MSC treatment

Note: ARDS – Acute Respiratory Distress Syndrome

Source: 1. <http://gbiresearch.com/media-center/press-releases/cardiovascular-disease-market-us-to-lead-modest-growth-forecasts-gbi-research>.

# Business is focused on progressing the world-first clinical trial of CYP-001 in GvHD

<div>Pre-clinical</div> <div>Partnering</div> <div>World first clinical trial of CYP-001</div>	<input checked="" type="checkbox"/> Cymerus™ MSCs demonstrated a <b>significant survival benefit</b> in a pre-clinical rodent model of Graft vs. Host Disease	Completed
	<input checked="" type="checkbox"/> License option agreement secured with Fujifilm, including upfront payments and potential for <b>~US\$30m annual royalties</b>	Completed
	<input checked="" type="checkbox"/> <b>Cohort A: 8 participants completed clinical trial</b> providing early efficacy and safety data at lower dose level (1 million cells / kg)	8/8 patients recruited
	<input checked="" type="checkbox"/> <b>Independent safety and monitoring review</b> (DSMB) completed with recommendation to continue trial	Completed
	<input checked="" type="checkbox"/> <b>Cohort B underway: Further 8 participants</b> receive two CYP-001 infusions at the higher dose level (2 million cells / kg)	Commenced
	<input type="checkbox"/> <b>Results from phase 1 trial</b>	During 2018

# GvHD was the optimal first target area for several medical and commercial reasons

- MSCs have already shown to be an effective treatment against GvHD  
*In Japan MSCs have been approved for use as a treatment for GvHD*
- Short trial duration, with expected completion in early 2018
- Successful Cynata trial outcome opens the door to multiple further indications

1  
million

Stem cell transplants  
worldwide <sup>3</sup>

25  
million

International Marrow  
Donor Registries and  
Potential Donors <sup>4</sup>

70%

GvHD occurs in up to 70  
per cent of patients  
receiving stem cell  
transplant to treat blood  
cancer<sup>1</sup>

\$500m

market value for the  
treatment of GvHD<sup>2</sup>  
by 2021

**FUJIFILM's projections for the GvHD market show peak revenues of US\$300m p.a.  
which would result in >US\$30m per year in royalties for Cynata**

Sources: 1. <http://www.qimrberghofer.edu.au/2017/04/immune-cell-discovery-opens-possibility-new-treatment-deadly-disease/>

2. [https://www.visiongain.com/Report/1794/Global-Graft-versus-Host-Disease-\(GVHD\)-Market-2017-2027](https://www.visiongain.com/Report/1794/Global-Graft-versus-Host-Disease-(GVHD)-Market-2017-2027)

3. [http://www.fcarreras.org/en/a-total-of-1-million-stem-cell-transplants-have-been-performed-worldwide\\_147898](http://www.fcarreras.org/en/a-total-of-1-million-stem-cell-transplants-have-been-performed-worldwide_147898)

4. <https://bethematch.org/news/news-releases/international-marrow-donor-registries-reach-25-million-potential-donors--give-hope-to-searching-blood-cancer-patients-around-the-world/>

# GvHD Clinical Trial DSMB Analysis

- Date Safety Monitoring Board (DSMB) after Day 28 recommended the trial progress to the second cohort of patients (Cohort B)
- Cohort B receives a higher dose – two infusions of CYP-001 at 2 million cells per kilogram of bodyweight versus 1 million cells per kilogram of bodyweight in Cohort A
- DAY 100 Highlights:
  - **Overall Response rate was 100%** (all eight participants showed an improvement in the severity of GvHD by at least one grade compared to baseline)
  - **Overall survival was 87.5%** (one patient died of pneumonia, unrelated to treatment)
  - **Complete Response rate was 50%** (GvHD signs/symptoms completely resolved in four out of eight patients)
  - **No treatment-related serious adverse events** of safety concerns identified
  - **Trial recruitment has progressed to the second cohort** (Cohort B) at all 7 sites in the UK and Australia
  - **Trial expected to complete during CY18**

# Fujifilm has demonstrated confidence in Cynata's platform through a licensing agreement for GvHD

**FUJIFILM** is one of the largest global investors in regenerative medicine

- **2014: Fujifilm takes a controlling stake in Japan Tissue Engineering Co. (J-Tec)**
  - J-Tec is a leading manufacturer of tissue engineered medical products, used in regenerative medicine
- **2015: Fujifilm paid US\$307m for CDI, Cellular Dynamics International**
  - CYP sourced its iPSC's from CDI
- **2016: Fujifilm acquires Takeda Pharmaceuticals' >70% stake in Wako Pure Chemical Industries for US\$1.3bn. Synergies include:**
  - Regenerative medicine (particularly cell based therapies); Contract Development and Manufacturing Organization (CDMO) in Pharmaceutical Business
- **2017: Fujifilm Holdings Corp said it aimed to spend 500 billion yen in strategic acquisitions over 3 years** (all outside its photo film business)

**License overview:** Development and commercialisation of Cynata's MSCs for GvHD

**Strategic equity**  
(A\$4m)

- Fujifilm receives **9%** equity in Cynata via Placement

**Exercise of Fujifilm option**  
(US\$3m)

- Any time up to 90 days after completion of Phase 1 trial.
- Upfront **US\$3m** milestone payment
- Fujifilm responsible for all further development activities and costs

**Phase 2 and beyond**  
(US\$30m+ p.a.)

- Fujifilm to pay Cynata **agreed milestones (\$60m+)** and **double-digit royalties** on product sales
- FUJIFILM's projections for the GvHD market show **peak revenues of US\$300m p.a.** correlating to **>US\$30m** per year in royalties for Cynata



# Board and management overview



**Dr Paul Wotton**  
Chairman

- Former CEO of Ocata Therapeutics (NASDAQ: OCAT) managing it through a take-over by Astellas Pharma, in a US\$379m transaction
- Previous executive roles with Antares Pharma Inc. (NASDAQ: ATRS), Topigen Pharmaceuticals and SkyePharma
- Founding CEO, Sigilon Therapeutics; member of the boards of Vericel Corporation and Veloxis; past Chairman of the Emerging Companies Advisory Board of BIOTEC Canada

*Expertise running and monetising Ocata Therapeutics, acquired by Astellas*



**Dr Ross Macdonald**  
Managing Director  
Chief Executive Officer

- 30 years' experience and a track record of success in pharmaceutical and biotechnology businesses
- Previous senior management positions with Hatchtech, Sinclair Pharmaceuticals, Connetics Corporation (Palo Alto, CA), and Stiefel Laboratories, the largest independent dermatology company in the world and acquired by GSK in 2009 for £2.25b

*Track record of success in pharmaceutical and biotechnology businesses*



**Dr Stewart Washer**  
Non-Executive  
Director

- 20+ years of CEO and Board experience in medical technology, biotech and agrifood companies
- Chairman of Orthocell Ltd and Minomic International.
- Previously CEO roles with Calzada (ASX:CZD), Phylogica (ASX:PYC) and Celentis and managed the commercialisation of intellectual property from AgResearch in New Zealand with 650 Scientists and \$130m revenues

*Deep experience growing companies as CEO and on the Board*



**Dr John Chiplin**  
Non-Executive  
Director

- Significant international experience in the life science and technology industries
- Recent transactions include US stem cell company Medistem (acquired by Intrexon), Arana (acquired by Cephalon), and Domantis (acquired by GSK)
- Was head of the \$300M ITI Life Sciences investment fund in the UK and his own investment vehicle, Newstar Ventures.

*Overseen and managed a broad range of life sciences transactions*



**Mr Peter Webse**  
Non-Executive Director  
Company Secretary

- +25 years' company secretarial experience
- Managing Director of Platinum Corporate Secretariat Pty Ltd, a company specialising in providing company secretarial, corporate governance and corporate advisory services

*25+ years company secretarial and management experience*



**Dr Kilian Kelly**  
Vice President,  
Product Development

- 15 years' experience in pharmaceutical/ biotechnology research and development, in both commercial and academic settings
- Previous appointments include Senior Director, Drug Development at Biota Pharmaceuticals (NASDAQ: BOTA), Vice President, Regulatory and Clinical at Mesoblast Limited (ASX:MSB)

*Academic and commercial excellence, extensive relevant management experience*

# Investment Summary

1

**Unique technology to efficiently mass-produce mesenchymal stem cells (MSCs),** a highly promising type of therapeutic stem cell

2

**World first clinical trial in progress** with clear early efficacy and safety data received from first patient cohort

3

**Cynata's initial target area is GvHD,** intended to prove the quality of the MSC's produced by its patented Cymerus™ platform

4

**Scalable business model** intended to target a **broad range of disease target areas** over time, and monetise these through licensing & partnerships

5

**Large, active and growing market,** with over 650 trials investigating the efficacy of MSCs in treating medically and commercially important diseases

6

**Monetisation of the business model has already commenced,** as license options have been entered with Fujifilm, who are Cynata's largest shareholder with 9%

7

**Strong balance sheet** with cash runway into 2019 based on current projections

# Thank you for your attention

## **Cynata Therapeutics Limited**

Level 3  
62 Lygon Street  
Carlton  
Victoria 3053  
Australia

## **Contact details:**



[ross.macdonald@cynata.com](mailto:ross.macdonald@cynata.com)



+61 (0) 412 119343



[www.cynata.com](http://www.cynata.com)

