

### DMX-200 Phase 2a trial

# Strong safety and encouraging efficacy signals

Investor presentation 12 July 2017

#### Disclaimer



Some of the information in this presentation may refer to Dimerix Limited ("Dimerix" 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 regarding Dimerix.

This presentation does not constitute an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any security in Dimerix, 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 Dimerix 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. Dimerix 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 Dimerix 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 Dimerix, 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 Dimerix 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 Dimerix 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 Dimerix 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, Dimerix 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).

#### Presentation highlights Dimerix Limited (ASX:DXB)

## 👉 Dimerix

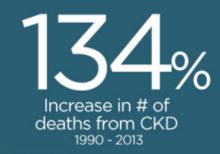
- Phase 2a clinical trial for Chronic Kidney Disease (CKD) now complete in 27 patients
- 2. Phase 2a results
  - primary endpoint of safety and tolerability met
  - encouraging efficacy data (secondary endpoint) deemed clinically meaningful
- 3. Data informs dosing and patient population for Phase 2b trial design
- 4. Relatively low cost and short timeframe of lead clinical program, DMX-200, due to repurposing and Orphan Drug Designation
- Further drug development and licensing opportunities using Dimerix's patented Receptor- HIT platform technology

#### Chronic kidney disease (CKD)

## 👉 Dimerix

- CKD is a growing global health problem affecting over 13% of Australians, 14% of Americans.
- Growing in incidence due to large number of people living with obesity and diabetes.
- Damaged kidneys "leak" proteins into the urine. This is called proteinuria, and itself compounds the damage to the kidneys.
- Proteinuria is the most common symptom of the disease and is a strong indicator of future kidney deterioration.
- Standard of care therapy is focused on reduction of blood pressure.
- Deterioration leads to dialysis and/or transplant, which both have a huge impact on patient quality of life and healthcare budgets.





Source: Global Burden of Disease Study 2013

#### DMX-200 – lead program



- DMX-200 is an 'adjunct' therapy, which makes the development path less complex.
- Patients continue taking their standard of care medication (irbesartan) and add a second drug to this (propagermanium), which targets inflammation in the kidney.
- Both drugs have been in use for many years, and their safety profile is well understood.
- The combination of these drugs was identified using our Receptor-HIT discovery platform.

Kidney disease contributes to approximately



Source: Kidney Health Australia

#### Phase 2a Trial Protocol

## 👉 Dimerix

- 27 patients in an open label dose escalation study across 4 sites in Australia.
- Patients were on stable irbesartan prior to and throughout the study.
- Each patient received an oral dose of DMX-200, which was escalated at four week intervals, unless proteinuria was within normal limits.
- Patients commenced on 10 mg (three times per day) of propagermanium, and were escalated to a maximum of 80mg (three times per day).
- Primary end point was to determine the safety and tolerability of DMX-200 over a variety of dose ranges, as an adjunct to standard of care drug irbesartan.
- Secondary end point was to evaluate the effects of DMX-200 across various biomarkers including proteinuria.

#### Phase 2a trial primary endpoint met



- Primary endpoint met no serious safety concerns were observed.
- The clinically relevant safety measures were blood pressure (hypertension / hypotension), eGFR (a measure of renal failure) and serum potassium (hyperkalaemia). There were no clinically relevant changes in these primary safety parameters observed.
- Patients were dosed for a median of 28 weeks across the range of doses.
- Three patients withdrew from the study for reasons of anaemia, depression and progression of renal disease, reducing the study size from 27 down to 24 patients.
- DMX-200 was generally well tolerated with an adverse event profile consistent with underlying patient population and associated co-morbidities.

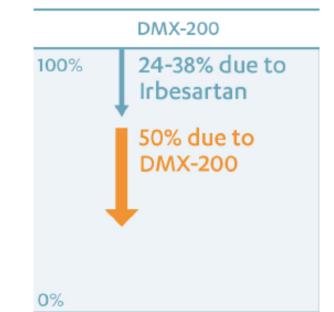


Kidney disease currently affects an estimated 1.7 million Australians

Source: Kidney Health Australia

#### Trial outcomes – secondary endpoints

- 6 of the 24 patients to complete the study achieved >50% reduction in proteinuria during at least one dose level of propagermanium.
- This is a 50% improvement over and above the patients' stable improvement on standard of care medication (irbesartan\*), classifying them as a "responder".
- This result has been deemed clinically meaningful.



Responders schematic

Dimerix

\*Double blinded placebo controlled studies in patients with diabetic nephropathy and proteinuria showed irbesartan reduced proteinuria by 24 – 38%

#### References:

- N Engl J Med (2001) 345:870-878 September 20, 2001 DOI: 10.1056/NEJMoa011489

- Nephrol Dial Transplant (2012) 27: 2255–2263 December 15, 2011 DOI: 10.1093/ndt/gfr696

#### Post-hoc analysis



- *Three further patients,* after dosing ceased, saw an increase in proteinuria of 50% or greater, compared to their final measure on treatment.
- This increase suggests that DMX-200 may have had a possible benefit in slowing the disease progression in these patients.
- Only one patient saw a greater than doubling of proteinuria during the study, and was classified by their physician to be showing normal disease progression.



## Phase 2a trial outcomes – Special Access Scheme



- Of the 24 patients to complete the study,11 (45%) applied for and were granted special access to the treatment, upon recommendation of their physician.
- The physicians' recommendation was based on patients meeting one or more of the following criteria:
  - Responders (>50% reduction in proteinuria)
  - Achieving a reduction in proteinuria
  - >50% increase proteinuria 4 weeks after dosing ceased, possibly indicating a benefit in slowing disease progression
- The Australian Therapeutic Goods Administration's Special Access Scheme is a program through which participants in a clinical study can continue to access a drug, following completion of the trial.

Most dialysis patients need treatment at least 3 days a week for 5 hours a session to stay healthy



Source: Kidney Health Australia



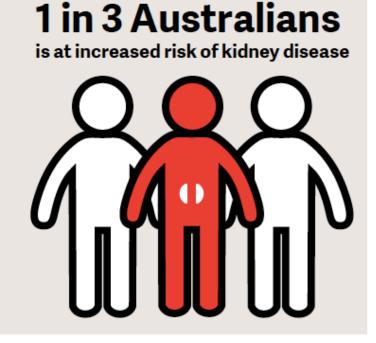
"These are very encouraging data. DMX-200, and its combination with existing best therapy, appears safe and was well tolerated. A 50% additional fall in proteinuria is a 'high bar' to set in studies of this type and the observation of this efficacy endpoint in 25% of the patients certainly warrants further clinical investigation in a larger, more targeted, population."

Associate Professor David Packham, Director of the Melbourne Renal Research Group

David Packham is one of the Principal Investigators on the study. David has more than 30 years experience in clinical research and has conducted in excess of 50 studies. His formal qualifications include his basic medical degree from the University of London (1981) and his subsequent Doctorate of Medicine from the University of Melbourne (1989).

#### Phase 2a trial outcomes – summary

- Primary end point met no serious safety concerns were observed.
- Secondary end point encouraging efficacy 6 of 24 patients classified as "responders" (>50% reduction in proteinuria clinically meaningful).
- Trial data can now be used to shape phase 2b trial design.
- 11 of 24 patients requesting DMX-200 under TGA's Special Access Scheme.



Dimerix

Source: Kidney Health Australia

#### Next steps and newsflow

## 👉 Dimerix

- Human pharmacokinetics study on track to complete 2H CY2017.
- Phase 2b to explore efficacy in refined patient population using optimal doses identified in Phase 2a study, compared with placebo.
- Ongoing discussions with big pharma and key opinion leaders.
- Full data to be presented in a leading clinical forum in due course.

#### 12 months news flow

- Completion of commercial dosage form
- Completion of human pharmacokinetic study
- Commencement of Phase 2b study
- Presentation of 2a data in a scientific forum
- Filing Orphan Drug designation in Europe (2018)
- Meetings with European Regulatory Advisors (2018)

#### DMX-200 Development & licensing timeline



Activity	Q2 2017	Q3 2017	Q4 2017	2018	2019	2020
Phase 2a						
Manufacture of commercial tablet						
Human PK study - commercial tablet						
Phase 2b						
End of Phase 2 consultation with FDA						
Single pivotal Phase 3						
Licensing opportunities						

**Current development activities** 



#### **Competitive landscape for FSGS**



## **Retrophin**

- NASDAQ: RTRX
- Market cap : ~US\$ 674million
- Phase 2 asset, sparsentan, for treating FSGS – a dual angiotensin endothelin receptor blocker



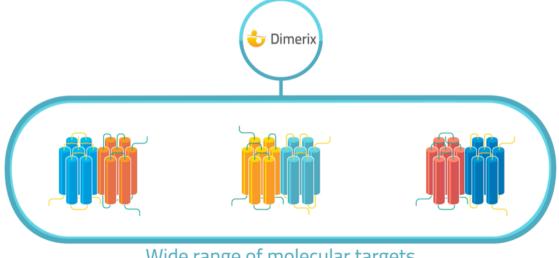
- NASDAQ: CCXI
- Market Cap: ~US\$ 355 million
- Completed Phase 2 for CCX140 in diabetic nephropathy – a CCR2 antagonist
- Vifor licensed CCX-140 from Chemocentryx with Phase 2 data for use *outside the US* for \$50m upfront

#### Limited competition in a large market



#### **Receptor-HIT**

- Patented tool that enables understanding of receptor interactions
- Particularly suited to GPCRs most targeted receptor class for drug discovery
- Can identify **new uses** for existing drugs and drive the **discovery** of new drugs and research programs



Wide range of molecular targets

**Global pharmaceutical companies need access to Receptor-HIT** technology to develop safe new drugs

#### **Corporate Overview**



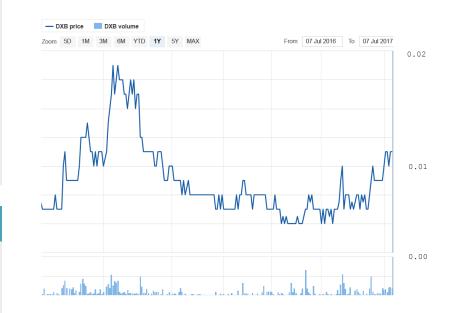
#### **Corporate Snapshot**

DXB
\$.011
\$20.6m
\$2.8m
1,829.9m

#### **Major Shareholders**

Mr Peter Meurs	17.33
Yodambao Pty Ltd	5.11
Mrs Wishney Sritharan Krishnarajah	2.47
White Family	2.21
SRV Custodians Pty Ltd	2.07
Pfleger Family	1.70
Jampaso Pty Ltd (Williams Family)	1.51

#### Share price history







### Contact

Kathy Harrison Chief Executive Officer

+61 419 359 149 kathy.harrison@dimerix.com

Dimerix Limited ACN 001 285 230 www.dimerix.com