

## Due Diligence and Valuation Report

Arrowhead code:	69-13-02
Coverage initiated:	30-June-2022
This document:	17-August-2022
Fair Share Value Bracket:	AUD 0.38 to AUD 0.46
Share Price (August 17, 2022):	AUD 0.16

### Analyst

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### Market Data

52-Week Range:	AUD 0.12 – AUD 0.36
90-Day Average Daily Volume:	332,714
Market Cap. on date:	AUD 51.3 million

### Financial Forecast (in AUD mn) (FY Ending –June)

Year	'22P*	'23P	'24P	'25P	'26P
NI	(5.73)	(6.27)	(2.55)	23.19	33.90
EPS (AUD)	(0.02)	(0.02)	(0.01)	0.07	0.11

\*Projected

### Company Overview

Dimerix Limited is a clinical-stage biopharmaceutical company with a portfolio of drug candidates for inflammatory causes of kidney and respiratory diseases. The Company's lead drug candidate DMX-200 is in Phase 3 trials for the treatment of Focal Segmental Glomerulosclerosis ("FSGS"), which is a rare kidney disease with no approved treatment anywhere in the world. DMX-200 is one of only two drug candidates that are currently undergoing Phase 3 trials as a treatment for FSGS and the other drug candidate (Sparsentan being developed by Traverre Therapeutics) is a potential complement to DMX-200 in the treatment of FSGS. DMX-200 has been granted Orphan Drug Designation by the FDA and EMA as a treatment for FSGS. The Orphan Drug Designation qualifies DMX-200 FSGS program for various development incentives including exemption from certain application fees, a fast-tracked regulatory pathway to approval, and market exclusivity for seven years in the US and ten years in Europe if regulatory approval is received.

Dimerix is also developing DMX-700 drug candidate for Chronic Obstructive Pulmonary Disease ("COPD"). Both DMX-200 and DMX-700 were identified using Dimerix's proprietary Receptor-HIT technology that analyses G-Protein Coupled Receptors combinations and creates novel therapies for underserved medical conditions. In addition to identifying new drugs, this proprietary technology also helps repurpose existing drugs for different indications.

### Key Highlights

1. Clinical data to date demonstrates a strong safety profile and efficacy of DMX-200 as a treatment for FSGS. DMX-200's Phase 3 clinical study spans 12 countries and received FDA IND approval in the US. The Company has already recruited 11 patients for the clinical study.



Company:	Dimerix Limited
Ticker:	ASX: DXB
Headquarters:	Victoria, Australia
Non-Executive Chairman:	James Williams
CEO & Managing Director:	Nina Webster
Website:	<a href="https://dimerix.com">https://dimerix.com</a>

2. Dimerix is adequately funded for its flagship FSGS program after completing aggregate capital raises of AUD 24 million and receiving AUD 1 million in aggregate from the Australian Government's Biomedical Translation Bridge ("BTB") grant in early 2022.
3. Dimerix appointed IQVIA, the largest global CRO, to facilitate DMX-200's Phase 3 clinical study for FSGS and established manufacturing capability in the US to improve commercial scalability and global logistics.

### Key Strengths

1. Dimerix's lead clinical asset DMX-200 is a high-potential drug candidate that is in Phase 3 trials as a treatment for FSGS, with an addressable market of \$1 billion plus and no direct competition.
2. Both DMX-200 and DMX-700 drug candidates were identified using Dimerix's proprietary Receptor-HIT assay, which can be leveraged to identify new opportunities, thereby strengthening the Company's development pipeline and mitigating product failure.

### Key Risks

The Company's key risk is that all its products are in the development and trial phases. The Company operates in an industry where research and development ("R&D") and regulatory approval processes are long and capital-intensive and even then, products have a limited probability of entering the market. As an early-stage company, Dimerix is heavily reliant on its management being able to successfully raise capital from time to time. Moreover, the Company outsources multiple activities, including R&D, clinical testing, manufacturing, etc., which exposes it to a moderate amount of risk in case of disruptions from the partners' end.

### Valuation & Assumption

Based on its due diligence and valuation estimates, Arrowhead believes that Dimerix's fair share value lies in the AUD 0.38 to AUD 0.46 bracket, which is calculated using a blended valuation method: with 33.3% weighting to rNPV method, 33.3% weighting to NPV method and 33.4% weighting to Comparable Companies Valuation method. Our rNPV model suggests a fair value of AUD 0.45, the NPV model suggests a fair value of AUD 0.43 while a relative valuation provides a fair value of AUD 0.38.

## Table of Contents

<b>Investment Thesis.....</b>	<b>3</b>
<b>Company Presentation .....</b>	<b>5</b>
<b>News .....</b>	<b>11</b>
<b>Listing Information .....</b>	<b>14</b>
<b>Management and Governance .....</b>	<b>15</b>
<b>Products.....</b>	<b>17</b>
<b>Industry Analysis .....</b>	<b>23</b>
<b>Risk Profile Analysis.....</b>	<b>26</b>
<b>Financial Analysis.....</b>	<b>28</b>
<b>Valuation.....</b>	<b>33</b>
<b>Analyst Certifications .....</b>	<b>39</b>
<b>Appendix.....</b>	<b>40</b>
<b>Notes and References .....</b>	<b>41</b>

## **Investment Thesis**

Arrowhead is initiating equity research coverage of Dimerix Limited with the following investment highlights:

### **DMX-200 is a High-potential orphan drug candidate addressing the \$1 billion+ FSGS niche**

Dimerix's lead clinical asset DMX-200 is a high-potential drug candidate that is in Phase 3 trials as a treatment for FSGS, which is a rare kidney disease for which there is no approved treatment anywhere in the world. Besides, Dimerix is one of the two companies which have a potential drug candidate in Phase 3. The current addressable market for DMX-200 in the US, which is Dimerix's primary market, alone is 40,000 people and this increases by more than 5,400 each year. Dimerix has received orphan drug designation for DMX-200 for the treatment of FSGS in the US and Europe. Orphan drug status provides several incentives that can help Dimerix fast-track DMX-200's trial and regulatory approval process and accelerate its time to market. These incentives include shorter approval pathways, financial incentives, and an extended period of exclusivity following drug approval.

### **Playing into the Rapidly Improving Market for Orphan Kidney Diseases**

Historically, there was a lack of adequate public policy initiatives and incentive measures to promote the development of treatments for orphan kidney diseases like FSGS. This contributed to the high cost and poor management of orphan kidney diseases. However, since 2018 regulations have been rapidly revamped to adopt better treatment guidelines such as acceptance of surrogate endpoints like eGFR and protein urea decline in lieu of the former clinically meaningful endpoints (also termed as "hard endpoints"). These regulatory developments have caught the interest of many stakeholders, which is reflected in the emergence of new potential drugs in various phases of clinical development for the treatment of orphan kidney disease. Many M&A transactions, including large ones such as the \$11 billion acquisition of Vifor Pharma by CSL Behring, have been completed globally in this space by large pharmaceutical companies since 2020. Dimerix is one of the two companies with a potential drug candidate in Phase 3 clinical stage for FSGS and more notably, DMX-200 complements other Phase 3 drug candidates under development.

### **Well Capitalized to finance its FSGS Program and Well Positioned to Commercialize DMX-200**

We believe that Dimerix is well funded to support the Phase 3 FSGS program for its lead DMX-200 product candidate after completing an AUD 24 million capital raise in Q1'22 and receiving AUD 1 million in aggregate from the Australian Government's Biomedical Translation Bridge ("BTB") grants until 31 March 2022. The Company is in discussions with major international pharmaceutical companies for potential commercial partnerships for DMX-200. The Company has also developed manufacturing capability through an FDA-approved global contract manufacturing organization based in the US and has completed commercial-scale batch manufacturing for DMX-200 through this partner. With these arrangements in place, we believe that the Company is well positioned for DMX-200's commercialization once it completes Phase 3 trials and obtains regulatory approvals.

### **Diabetic kidney disease and COPD hold Long-term Potential**

Dimerix has two long-term assets in its product pipeline - DMX-200 for diabetic kidney disease currently in the Phase 2 clinical-stage and DMX-700 for COPD in the pre-clinical stage. The addressable market of DMX-200 for diabetic kidney disease indication is significant because, there were 23 million diagnosed diabetics in the US in 2017, and the incidence of diabetes is estimated to grow by 54% by the year 2040. Therefore, the addressable market for diabetic kidney disease is estimated to grow at a CAGR of 4.3% from USD 2.49 billion in 2021 to USD 3.34 billion by 2028, driven by the rise in the incidence of diabetes globally. The

Company's other drug candidate under development – DMX-700 for COPD, also provides long-term opportunity because the global COPD treatment market was valued at USD 14 billion in 2017 and is projected to increase at a CAGR of 4.9% till 2026.

### **Proprietary Receptor-HIT technology offers the potential to build a Deep Product Pipeline**

Dimerix is developing all its products on its proprietary Receptor-HIT technology which helps investigate G Protein-Coupled Receptors ("GPCRs"). Receptor-HIT technology provides Dimerix a major competitive advantage because it can rapidly screen and help identify interactions of known and orphan GPCRs. There are more than 800 GPCRs in the human body and over 150 of them are orphan GPCRs as their natural (or endogenous) ligand has not been identified and their mechanism of action is not yet explored. This technological advantage allows the Company to potentially develop alternative use cases and build a large pipeline of new product candidates.



DMX-700	COPD	
Other Candidates	Multiple	

## DMX-200

DMX-200, a chemokine receptor (“CCR2”) antagonist, is a novel drug candidate for treatment of inflammatory causes of renal and respiratory disease. DMX-200 is administered as the adjunct therapy to patients already receiving an angiotensin receptor blocker, which is the standard care of treatment for kidney disease. The prognosis of sclerotic kidney disease involves three key mechanisms – firstly, hyperfiltration of and hypertension within blood vessels of the glomeruli; secondly, inflammatory cell infiltration of the kidneys and subsequent fibrosis; and thirdly, loss of specialized cells from the glomeruli called Podocytes which cannot regenerate. So, when DMX-200 is administered together with an angiotensin receptor blocker to kidney disease patients, the angiotensin receptor blocker blocks cellular receptors responsible for hyperfiltration and hypertension within blood vessels of the glomeruli, and DMX-200 blocks chemokine receptor 2 which initiates the attraction of inflammatory cells to the kidney. Certain kidney cells express both receptors which interact and thereby allow activation of the angiotensin receptor to indirectly activate CCR2. This means that using only one compound does not completely block activation of CCR2 and results in only a partial therapeutic response. Blocking both AT1R and CCR2 pathways in certain rare chronic kidney diseases like FSGS, reduces proteinuria, protects podocytes, and prevents glomerulosclerosis. Thus, the total benefit of combining DMX-200 with an angiotensin receptor blocker is greater than the sum of the two individual effects.

DMX-200’s Phase 3 clinical program for FSGS is Dimerix’s flagship program. Phase 3 study is currently underway in 12 countries and received FDA IND approval in the US, with 11 patients already recruited. In addition to FSGS, Dimerix is developing DMX-200 for the treatment of Diabetic Kidney Disease and acute respiratory distress syndrome (“ARDS”) in patients with COVID-19.

**FSGS:** FSGS is a rare disease that attacks the kidney’s filtering units, where blood is cleaned called the “glomeruli”, causing irreversible scarring. This leads to permanent kidney damage and eventual end-stage kidney failure, requiring dialysis or kidney transplant. After a patient is diagnosed with FSGS, it takes on average 5 years to reach the onset of complete kidney failure and the disease affects both adults and children as young as two years old. Even after receiving a kidney transplant, approximately 40% will get re-occurring FSGS in the transplanted kidney. There are about 40,000 patients currently diagnosed with FSGS in the US alone and 50% of these patients are expected to progress to kidney failure. <sup>i, ii</sup> As such, FSGS is potentially a billion-dollar plus market in the US alone.

DMX-200 for FSGS has been granted Orphan Drug Designation by the FDA and EMA. The Orphan Drug Designation qualifies DMX-200 FSGS program for various development incentives including exemption from certain application fees, a fast-tracked regulatory pathway to approval, and market exclusivity for seven years in the US and ten years in Europe if regulatory approval is received. The Company has already started recruiting patients using approved surrogate endpoints for the global Phase 3 study in FSGS patients. The Company has appointed IQVIA, the world’s largest Contract Research Organisation (“CRO”), as its lead contract research organization to conduct late-stage clinical trials for its FSGS program.

**Other Indications:** In addition to FSGS, Dimerix is developing DMX-200 for the treatment of Diabetic Kidney Disease and acute respiratory distress syndrome (“ARDS”) in patients with COVID-19.

DMX-200 is under Phase 2 trials for the treatment of Diabetic Kidney Disease. The disease is progressive, and as such will ultimately lead to kidney failure and dialysis. There were 23 million diagnosed diabetics in the US in 2017, and the incidence of diabetes is estimated to grow by 54% by the year 2040. The addressable market for diabetic kidney disease is estimated to grow at a CAGR of 4.3% from USD 2.49 billion in 2021 to USD 3.34 billion by 2028, primarily driven by a rise in the incidence of diabetes globally.<sup>iii</sup>

DMX-200 is also under investigation as a potential treatment for ARDS in patients with COVID-19. Currently, two independent Phase 3 programs are underway for patients in the early stage of COVID-19 infection, before the onset of pneumonia, and for patients in the late stage of COVID-19 infection with moderate to severe pneumonia.

Although the threat of COVID-19 is declining, the results of the above two studies can have far-reaching implications for DMX-200 as a potential treatment for the wider pneumonia therapeutics market. Typically, antiviral medications are effective at preventing damage caused by a virus when administered within 3-to-5 days of infection, when many are asymptomatic. Also, antivirals are usually very specific for a virus and sometimes even the particular strain of virus. In contrast, DMX-200 does not rely on early inhibition of viral replication and aims to prevent damaging immune response regardless of vaccination or antiviral treatment or the specific strain of virus. As such DMX-200 may be beneficial for patients with a wide range of respiratory diseases in addition to COVID-19. The addressable market size for pneumonia (including COVID-19) is expected to reach USD 18.5 billion by 2029, growing at a CAGR of 10% in the forecast period of 2022 to 2029.<sup>iv</sup>

## **DMX-700**

DMX-700 is currently undergoing pre-clinical studies for the treatment of COPD and data are expected in the second quarter of 2022. COPD is the third-leading cause of death in the world and although treatments exist to improve the symptoms of COPD, there is currently no approved drug to slow the progression of the condition or cure it.<sup>v</sup> The global COPD treatment market was valued at USD 17.3 billion in 2021 and is projected to reach USD 34.9 billion by 2030, growing at an implied CAGR of 7.3%.<sup>vi</sup> Additionally, the activity of DMX-700 was tested in mice using an oral dose delivery in the PPE model of COPD, demonstrating an 80% reduction in lung injury versus control. DMX-700 was identified as a novel oral candidate for the treatment of COPD using Dimerix proprietary Receptor-HIT platform.

## Company Milestones

Year	Event
2004	<ul style="list-style-type: none"> <li>Incorporated as Dimerix Bioscience, a private company based on Receptor-Heteromer Investigation Technology (Receptor-HIT)</li> </ul>
2014	<ul style="list-style-type: none"> <li>Became a public unlisted company in June 2014</li> </ul>
2015	<ul style="list-style-type: none"> <li>Became a wholly owned subsidiary of Sun Biomedical Limited through a reverse takeover in July 2015</li> <li>Sun Biomedical changed its name to Dimerix Limited in November 2015</li> <li>Received Orphan Drug Designation for its DMX-200 for treatment of Focal Segmented Glomerulosclerosis ("FSGS") kidney disease from the United States Food and Drug Administration</li> </ul>
	<ul style="list-style-type: none"> <li>Listed on ASX under ticker "DXB"</li> <li>Received patent in the United States for the use of DMX-200 in the treatment of kidney disease</li> </ul>
2017	<ul style="list-style-type: none"> <li>Raised AUD 2 million through the issue of shares at AUD 0.006 per share</li> </ul>
2018	<ul style="list-style-type: none"> <li>Raised AUD 4.5 million through the issue of shares at AUD 0.12 per share</li> <li>Received Orphan Drug Designation for its DMX-200 for treatment of FSGS kidney disease from the European Committee for Orphan Medicinal Products</li> </ul>
	<ul style="list-style-type: none"> <li>Received patent from Canada and Europe for the use of DMX-200 in the treatment of kidney disease</li> <li>Raised AUD 2.5 million through the issue of shares at AUD 0.11 per share</li> </ul>
2020	<ul style="list-style-type: none"> <li>Raised AUD 5.8 million through the issue of shares at AUD 0.36 per share</li> <li>Awarded AUD 1 million over 12 months from the Australian Government's MRFF through the BTB program for the development of DMX-200 as a new treatment for respiratory complications associated with COVID-19</li> </ul>
	<ul style="list-style-type: none"> <li>Raised AUD 24 million through the issue of shares at AUD 0.20 per share</li> <li>Received Innovation Licensing and Access Pathway designation for the use of DMX-200 for treatment of FSGS kidney disease</li> </ul>
2022	<ul style="list-style-type: none"> <li>Received first regulatory approval outside of Australia and New Zealand to conduct Phase 3 of a clinical trial on FSGS kidney patients in Europe</li> <li>Completed all milestones of the Australian Government's BTB grant of AUD 1 million and the full fund is received</li> </ul>



- Recruited 11 patients in ACTION3 phase 3 pivotal clinical trial of DMX-200 in the treatment of FSGS kidney disease
- DMX-700 shows significant efficacy with 80% reduction in lung injury of COPD

## Corporate Strategy

The Company's lead drug candidate DMX-200 is in Phase 3 trials for the treatment of FSGS. In addition to FSGS, Dimerix is developing novel treatments for inflammatory causes of kidney and lung diseases in important therapeutic areas where inadequate or no medical treatment is currently available. Key elements of the Company's strategy include:

### 1. Prioritizing the DMX-200 FSGS program as a potential cash cow

All of Dimerix's products are currently under development and it is not generating any operating revenue. Historically, the Company has relied on equity financing and government grants to fund its R&D investments and corporate expenses. At present, the Company appears to be well funded for Phase 3 clinical program for FSGS and is not foreseen to raise significant amounts of additional capital in the near term. The Company plans to continue focusing primarily on its FSGS program and taking it to commercialization at the earliest to maximize its revenue potential, especially in the current environment which is highly conducive for orphan kidney disease treatments.

### 2. Accelerating clinical trials of product candidates through contract servicing

Dimerix has multiple clinical products which are in the late stage of development. The Company plans to fast-track its clinical trials so that these products can be launched in the market quickly. The Company is evaluating potential partners and collaborators with requisite expertise and resources who can help with this. The Company has already appointed IQVIA as the lead CRO to facilitate the Phase 3 clinical study of DMX-200 for FSGS. IQVIA is the largest global CRO and has extensive experience in running late-stage global FSGS clinical studies.

### 3. Building strategic alliances to enhance expertise and mitigate capital obligations

Dimerix plans to run a capital-light business by focusing on partnerships. It plans to enter into strategic alliances with drug manufacturing companies to avoid investments in setting up a manufacturing facility. The Company is planning to launch its products in the US market predominantly, followed by expansion to other countries. Therefore, the Company is assessing potential partners who can bring in expertise and capital to help with commercialization.

### 4. Entering into partnerships and collaborations to reduce R&D costs

Dimerix seeks to collaborate with potential R&D partners to complement its R&D activities. The collaboration programs are often partially funded by government grants. For example, Dimerix's collaboration program with the Harry Perkins Institute of Medical Research and the University of Western Australia ("UWA") is partially funded by the Australian Government. The Company plans to further engage with similar collaborative programs for cost-effective ways to develop its product candidates and mitigate its capital obligations.

### 5. Diversifying R&D investment approach to enhance the success rate of drug development

New drug discovery faces the challenges of high R&D costs, long timelines for drug development, low success rates, and regulatory hurdles. On the contrary, drug repurposing is claimed to be less costly, less time consuming, less risky, and has a higher success rate of commercialization. The Company is pursuing a diversified investment approach by targeting new chemical entities ("NCEs") along with repurposed drug candidates which enhances the probability of success of drug development effort compared to the development of NCEs alone. Dimerix will continue to focus on identifying new opportunities using its Receptor-HIT platform, in line with its long-term strategic goal of diversifying its IP portfolio and reducing the risk of product failure.

## News

### [Dimerix announces New Patent Family application for DMX-700](#)

*August 09, 2022*

With Phase 3 clinical studies in inflammatory diseases currently underway, the Company announced a new patent family application for its pipeline candidate, DMX-700. DMX-700 is used for the treatment of COPD. The application followed the recently announced 80% reduction versus control in induced lung injury in mice ( $p < 0.01$ ).

### [DMX-700 shows 80% reduction in Lung Injury](#)

*July 04, 2022*

In the new study, the activity of DMX-700 was tested in mice using an oral dose delivery in the PPE model of COPD. DMX-700 was identified as a novel oral candidate for the treatment of COPD using Dimerix proprietary Receptor-HIT platform. DMX-700 targets signalling by an Interleukin 8 receptor beta (IL8R $\beta$ ) and an angiotensin II type 1 receptor (AT1R) heteromer in COPD using two compounds together and achieves a synergistic effect in cells co-expressing IL-8R $\beta$  and AT1R by blocking both receptors simultaneously. DMX-700 resulted in a statistically significant 80% ( $p < 0.01$ ,  $n=6$ ) reduction in the PPE induced lung injury in mice.

### [Dimerix enters into agreement with Australian Centre for Accelerating Diabetes Innovations to conduct clinical trial of DMX-200 in diabetic kidney disease patients](#)

*June 07, 2022*

Dimerix has entered into an agreement with Australian Centre for Accelerating Diabetes Innovations ("ACADI") to conduct clinical trial of DMX-200 in diabetic kidney disease patients. This new trial provides another potential market opportunity for Dimerix in addition to its other Phase 3 trials underway.

### [Dimerix receives FDA approval for Phase 3 clinical trial of DMX-200 for FSGS in the US](#)

*May 09, 2022*

Dimerix received the US FDA approval for ACTION3 Phase 3 clinical study of DMX-200 in patients with FSGS in the US. The ACTION3 Phase 3 study will recruit across 75 sites in 12 different countries globally, with 19 of those clinical sites in the US. With the US FDA approval in place, the Investigational New Drug ("IND") application for the ACTION3 clinical study is now active, which enables the Company to start patient recruitment in the United States.

### [Dimerix receives an R&D tax rebate of AUD 3.7 million](#)

*March 29, 2022*

Dimerix received a tax rebate of AUD 3.7 million on its R&D expense for the period 2020-2021. The R&D tax incentive program was initiated to support research and development in Australia and the program is jointly managed by the Australian Taxation Office and AusIndustry.

### [Dimerix appoints Dr. Ash Soman as Chief Medical Officer](#)

*February 07, 2022*

Dimerix appointed Dr. Ash Soman as Chief Medical Officer and a member of the Company's executive management team. Dr. Soman would lead Dimerix's global clinical development programs.

[Dimerix commences Phase 3 clinical study of DMX-200 on patients with COVID-19 in India](#)

*January 17, 2022*

Dimerix announced that the first patient had been dosed with DMX-200 in India as part of its Phase 3 clinical study of DMX-200 on patients with COVID-19 infection. The study followed the CLARITY 2.0 protocol in which after dosing the first 80 patients, an interim safety analysis was planned to be conducted. Numerous sites were identified in India for conducting the study and shipments of DMX-200 were supplied to India from Dimerix's US-based supplier.

[Dimerix receives Australian ethics approval for its Phase 3 clinical study of DMX-200 on patients with COVID-19](#)

*December 23, 2021*

Dimerix announced that they had received ethics approval from the Research Ethics and Governance Office of Australia for the Phase 3 clinical study of DMX-200 on patients with COVID-19. The study was planned to take place in six sites across New South Wales, Victoria, and Queensland and was anticipated to start in January 2022.

[Dimerix updates successful completion of Data and Safety Monitoring Board review of DMX-200's ACE2 RAS modulation REMAP-CAP study in Europe](#)

*December 16, 2021*

Dimerix announced the successful completion of a planned review of DMX-200's ACE2 RAS modulation REMAP-CAP study in Europe by the Data and Safety Monitoring Board ("DSMB"). DSMB recommended to continue recruiting patients for the study. The Company also added that they had received ethics and regulatory approval from the UK and the Netherlands and were anticipating approvals from Italy and France.

[Dimerix receives Australian ethics and regulatory approval for its Phase 3 clinical trial- ACTION3 of DMX-200 on patients with Focal Segmented Glomerulosclerosis kidney disease](#)

*October 21, 2021*

Dimerix announced that it had received Australian regulatory and ethics approval to conduct Phase 3 clinical trials- ACTION3 of DMX-200 on patients with FSGS kidney disease. The trials had two interim analysis points, where data regarding proteinuria and kidney function was to be collected. Dimerix had selected 73 global sites to conduct the trials, five of these sites were in Australia. The Company had planned to submit documents for ethics and regulatory approval in the remaining sites by December 2021.

[Dimerix receives Innovative Licensing and Access Pathway designation for DMX-200](#)

*June 7, 2021*

Dimerix announced that it had received Innovative Licensing and Access Pathway ("ILAP") designation from the UK Medical and Healthcare Product Regulatory Agency for DMX-200. The ILAP designation could help by accelerating marketing authorization application assessment and risk assessment of DMX-200.

## [Dimerix updates results from the Phase 2 study of DMX-200 on patients with diabetic kidney disease](#)

*January 28, 2021*

Dimerix announced that the results from Phase 2 study of DMX-200 on patients with diabetic kidney disease showed a decrease in albumin level in urine. A 22% mean reduction in albumin level in urine was observed in patients administered with DMX-200 compared to patients treated with placebo. It was further noted that a greater reduction of albumin level in urine could be achieved with a longer treatment duration.

## [Dimerix updates results from the Phase 2 study of DMX-200 on patients with FSGS kidney disease](#)

*October 27, 2020*

Dimerix announced that the results from the Phase 2 study of DMX-200 on patients with FSGS kidney disease showed a decline in proteinuria. Further, a correlation was observed between the severity of proteinuria and an inflammatory molecule called Monocyte Chemoattractant Protein 1 ("MCP-1"). It was also observed that patients treated with DMX-200 showed a 39% reduction of inflammatory molecule MCP-1 compared to patients treated with placebo.

## [Dimerix announces DMX-700 program for Chronic Obstructive Pulmonary Disease](#)

*July 6, 2020*

Dimerix announced that DMX-700 program for Chronic Obstructive Pulmonary Disease ("COPD") had made advancements towards understanding the mechanism by which receptors cause damage to the lungs in patients with COPD. The Company believed that this understanding would further support and expand the DMX-700 intellectual property portfolio and patent positioning.

## [Dimerix announces the inclusion of DMX-200 in COVID-19 patients for Global REMAP-CAP platform trial protocol](#)

*June 4, 2020*

Dimerix announced that DMX-200 was included in the global Randomised, Embedded, Multifactorial Adaptive Platform trial for Community-Acquired Pneumonia ("REMAP-CAP") program for treating patients with Acute Respiratory Distress Syndrome ("ARDS") caused by COVID-19. REMAP-CAP is endorsed by World Health Organization and is funded by a consortium of government and non-government organizations.

## [Dimerix receives patent grants from Canada and Europe for DMX-200](#)

*July 11, 2019*

Dimerix announced that it had received patent grants for DMX-200 from Canadian Intellectual Property Office and European Patent Office. The patent grants are set to expire in 2023 and additional patent applications to extend the patent expiry date were expected to be filed later.

## [Dimerix signs a license agreement for the Receptor-HIT platform to Excellerate Bioscience](#)

*June 24, 2019*

Dimerix announced that its proprietary Receptor-HIT platform was licensed to Excellerate Bioscience, a UK-based contract research organization ("CRO") specializing in molecular and cellular pharmacology. Under the licensing agreement, Excellerate Bioscience will pay an undisclosed royalty to Dimerix.

## Listing Information

Dimerix Limited, headquartered in Victoria, Australia, is listed on the Australian Stock Exchange (ASX: DXB).

## Contacts

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## Top Shareholders as on May 12, 2022

Equity Holder	No. of ordinary shares held	Shareholding
Peter Meurs	44,179,309	13.8%
Merchant Group & Nominees	17,925,000	5.6%
Andrew Coates & Melinda Coates	9,500,000	3.0%
Bavaria Bay Pty Ltd	7,316,992	2.3%
Yadambao Pty Ltd	6,362,603	2.0%
Solequest Pty Ltd and Nominees	3,687,302	1.1%
Pflegger Family A/C and Nominees	3,137,874	1.0%
Others	228,764,586	71.2%
<b>Total</b>	<b>320,873,666</b>	<b>100.0%</b>

*Source – Dimerix Limited Investor Presentation, May 2022*

## Management and Governance

### **Dr James Williams**

#### *Non-Executive Chairman*

- Worked as CEO of Dimerix between 2007 and 2009
- Founder and Investment Director for Yuuwa Capital LP, a venture capital firm based in Western Australia
- Non-Executive Director at PolyActiva Pty Ltd, Perron Institute, Aleia Therapeutics, Demagtech Pty Ltd and SuperTrans Medical Ltd
- Served as Managing Director at Resonance Health Ltd and Argus Biomedical Pty Ltd, both of which are medical device companies
- Co-founded iCeutica Inc., a nano drug reformulation company
- Holds a PhD from Melbourne University, an MBA from University of Western Australia and an undergraduate degree in Biochemistry from the University of Aberdeen

### **Dr Nina Webster**

#### *CEO & Managing Director*

- Has more than 30 years of experience in the pharmaceutical industry, which includes leadership roles in investor relations, business development, and prosecution of intellectual property matters, as well as product development
- Worked as Commercial Director at Acrux Limited, a pharmaceutical company based in Australia
- Former Director of Commercialization and Intellectual Property at Immuron Ltd and spent six years with Wyeth Pharmaceuticals (now Pfizer) in the UK
- Holds a PhD in Pharmaceutics from Cardiff University, an MBA from RMIT University, and a master's degree in Intellectual Property Law from Melbourne University

### **Hugh Alsop**

#### *Non-Executive Director*

- Has almost 30 years of experience in international business development, partnering, drug development, and leading scientific teams
- Currently a non-Executive Director at Servatus Ltd, Eflare Corporation Pty Ltd, Avalyn Australian Pty Ltd, AnaptysBio Pty Ltd, and Lassen Therapeutics 1 Pty Ltd
- Former CEO of Hatchtech Pty Ltd and also former Director of Business Development at Acrux Limited
- Holds an MBA from Melbourne Business School and an undergraduate degree from the University of Melbourne

### **Dr Sonia Poli**

#### *Non-Executive Director*

- Has 20 years of experience working as an R&D professional in pharmaceutical companies
- Works as Executive Manager at AC Immune, a clinical-stage biopharmaceutical company

- Held various leadership and executive positions around various disciplines working at Hoffman la Roche and Addex Therapeutics
- Holds a PhD and a master's degree from Milan University

## **Hamish George**

*CFO/Company Secretary*

- Director at Bio101, a financial and administrative service company and CFO/Company Secretary for MTP Connect, a medical technologies and pharmaceuticals Industry Growth Centre
- Served as Finance Project Manager at Grosvenor Group, a real estate leasing company
- Worked as Senior Analyst at Pitcher Partners, an accounting and business advisory company
- Holds a master's degree in Professional Accounting from the RMIT University, a BCom from the University of Melbourne, a Certificate in Governance Practice from the Governance Institute of Australia and is a qualified Chartered Accountant

## **Dr Ash Soman**

*Chief Medical Officer*

- Has over 30 years of experience in clinical practice, clinical study design, medical affairs, compliance, patient safety, and corporate strategy
- Former Medical Director for IQVIA, a contract research organization based in Australia  
Worked at AstraZeneca, Sanofi-Aventis Australia-New Zealand, Oncosil Medical, and Roche
- Holds an MBA from The Business School, Imperial College of Science, Technology and Medicine, and an MBBS from the University of London. He is also a Member of the Royal College of Physicians-London.

## **Dr Robert Shepherd**

*Research and Development Director*

- Has over 14 years of experience leading multidisciplinary research and development teams
- Former Senior Development Manager at Medicines Development for Global Health, a non-profit organization in Australia, and also worked as Business Analyst at the Monash Vision Group and Communications Advisor at the Australian Society of Plant Scientists
- Holds an MBA from Monash University, a PhD in molecular cell biology and immunology, and a BS in Genetics

## **Bronwyn Pollock**

*Product Development Director*

- Has over 20 years of experience in the biotech and pharmaceutical industry
- Former Director of Product Development at Prota Therapeutics, an Australian biotech company, and held senior management positions in several companies including Neuren Pharmaceuticals Ltd, Hospira Australia, Acrux Ltd, and CSL Limited
- Holds an MBA and a BSc (Hons) from RMIT University



## Products

Dimerix’s lead clinical drug candidate is DMX-200, which is currently in a pivotal Phase 3 study for FSGS patients. The Company has other multiple late-stage programs for renal and respiratory indications as well as the proprietary Receptor-HIT assay technology. Further, the Company has identified other potential drug candidates using its proprietary Receptor-HIT assay, which are currently in early pre-clinical stage. A summary of the Company’s development pipeline is as follows:

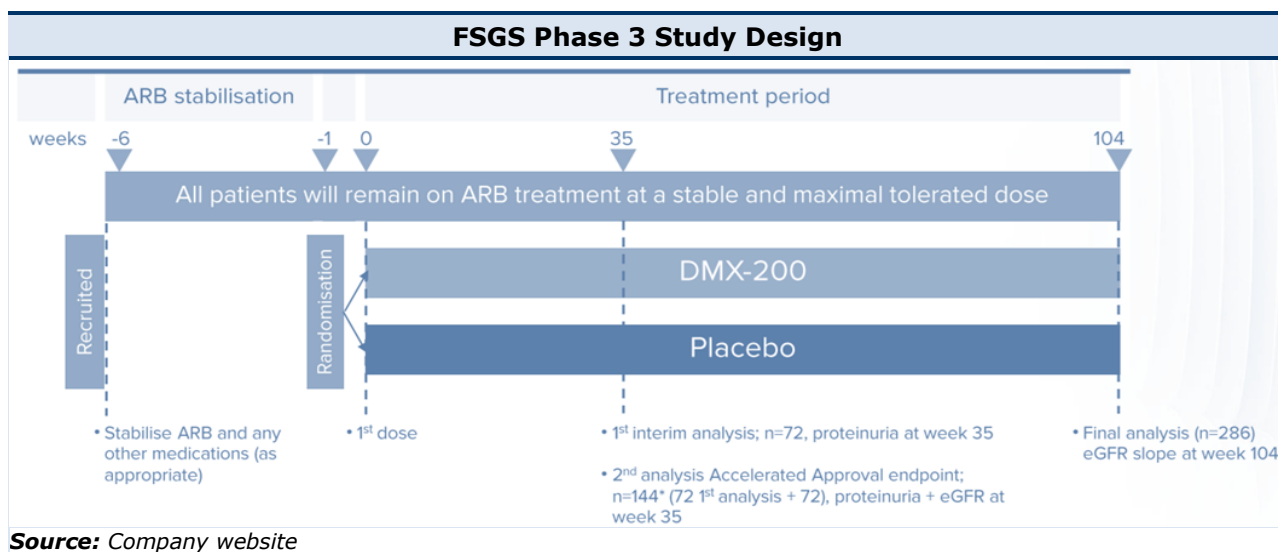
Product	Indication	Development Stage	Key Milestones
DMX-200	FSGS	Phase 3	<ul style="list-style-type: none"> <li>Phase 2a demonstrated encouraging efficacy and safety profile</li> <li>Phase 3 study is currently underway in 12 countries and received FDA IND approval in the US, with 11 patients already recruited</li> <li>Data from the Phase 3 study are expected in the first half of 2023</li> </ul>
	Diabetic Kidney Disease (“DKD”)	Phase 2	<ul style="list-style-type: none"> <li>Phase 2 demonstrated promising efficacy and safety profile</li> <li>Announced plans to initiate new DKD study by end of 2022/early 2023, in June 2022</li> </ul>
	Late COVID pneumonia	Phase 3	<ul style="list-style-type: none"> <li>Study recruitment is underway across Europe</li> <li>Enrolment of patients with moderate COVID-19 is paused temporarily to allow review of additional data prior to potentially resuming enrolment</li> <li>Data from the REMAP-CAP team is expected imminently</li> </ul>
	Early COVID respiratory	Phase 3	<ul style="list-style-type: none"> <li>Recruitment is underway across India and the first interim data is expected in the second quarter of 2022</li> <li>Data from CLARITY 1.0 study anticipated imminently</li> </ul>
DMX-700	COPD	Pre-clinical	<ul style="list-style-type: none"> <li>80% reduction in lung injury of COPD (<math>p &lt; 0.01</math>, <math>n = 6</math>)</li> </ul>
Other Candidates	Multiple	Early pre-clinical	<ul style="list-style-type: none"> <li>Additional target opportunities identified using Receptor-HIT</li> <li>Preliminary exploratory work underway</li> </ul>

**1. DMX-200**

DMX-200 is the adjunct therapy of a chemokine receptor (“CCR2”) antagonist administered to patients already receiving an angiotensin II type I receptor (“AT1R”) blocker - the standard of care treatment for hypertension and kidney disease. DMX-200 is a small molecule with New Chemical Entity status and administered as easy and convenient dosing in the form of a single capsule (120mg), twice daily to patients who are being treated with an ARB. The drug candidate is in multiple late-stage clinical programs for the following indications:

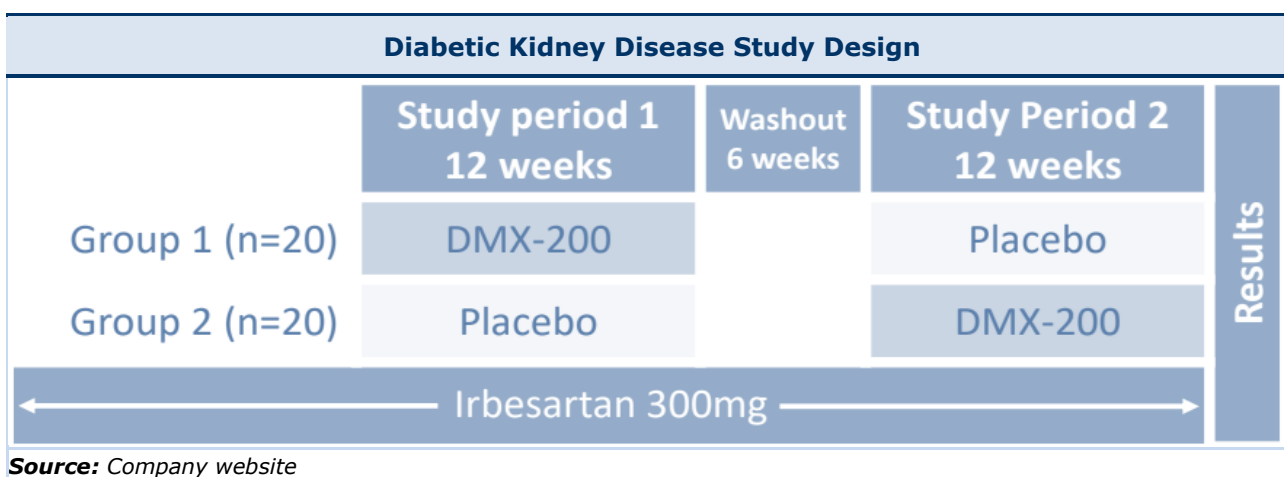
**FSGS:** FSGS is an acronym for Focal (“some”) Segmental (“sections”) Glomerulo (“of the kidney filtering units”) Sclerosis (“are scarred”). It causes inflammation and irreversible scarring of glomeruli, which are parts of the kidney that filter blood. DMX-200 is administered together with angiotensin receptor blocker, which is the standard care of treatment for kidney disease, to FSGS patients. Angiotensin receptor blocker blocks cellular receptors responsible for hyperfiltration and hypertension within blood vessels of the glomeruli and DMX-200 blocks chemokine receptor 2 which initiates the attraction of inflammatory cells to the kidney. Certain kidney cells express both receptors which interact and thereby allow activation of the angiotensin receptor to indirectly activate CCR2. This means that using only one compound does not completely block activation of CCR2 and results in only a partial therapeutic response. Blocking both AT1R and CCR2 pathways, reduces proteinuria, protects podocytes and prevents glomerulosclerosis in patients diagnosed with FSGS.

DMX-200 met primary and secondary endpoints in Phase 2a clinical study for FSGS and was found to be generally safe and well-tolerated by FSGS patients. The Phase 3 study is a randomised, double-blind, placebo-controlled study of the efficacy and safety of DMX-200 in patients with FSGS who are receiving a stable dose of an angiotensin II receptor blocker (“ARB”). Once the ARB dose is stable, patients (aged 18 to 80 years) will be randomized to receive either DMX-200 (120 mg capsule twice daily) or placebo. The primary endpoints for potential accelerated marketing approval are the percent change in protein in the urine (proteinuria) and change in eGFR from Baseline to Week 35 following treatment with DMX-200 compared with placebo, and the primary endpoint for full approval is the slope of eGFR from Baseline to Week 104 following treatment with DMX-200 compared with placebo. A blinded interim analysis will be performed in approximately 70 patients following Part 1 of the study to confirm both efficacy and study powering (for statistical measures), which is expected in the first half of 2023, based on the forecast rate of patient recruitment.



**Diabetic Kidney Disease:** Diabetes is the primary cause of kidney disease that leads to dialysis and need for transplantation. The main job of the kidneys is to filter wastes and extra water out of blood to make urine. The kidneys also help control blood pressure and make hormones that the human body needs to stay healthy. Diabetes causes high blood glucose, also called blood sugar, which can damage the blood vessels in the kidneys. When the blood vessels are damaged, kidney cannot function properly. Many people with diabetes also develop high blood pressure, which can also damage the kidneys. It is estimated that approximately a third of people with diabetes develop diabetic kidney disease, the leading cause of end-stage kidney disease requiring dialysis or kidney transplant and a major risk factor for cardiovascular disease and premature death. There is no cure for diabetic kidney disease, and current treatment options are ineffective as the kidneys deteriorate towards failure. The current treatment options include medications to reduce high blood pressure or glucose content in the blood, dialysis or kidney transplant. The progressive nature of kidney disease inevitably results in poor outlook for patients, as it most often results in total kidney failure and a poor quality of life.

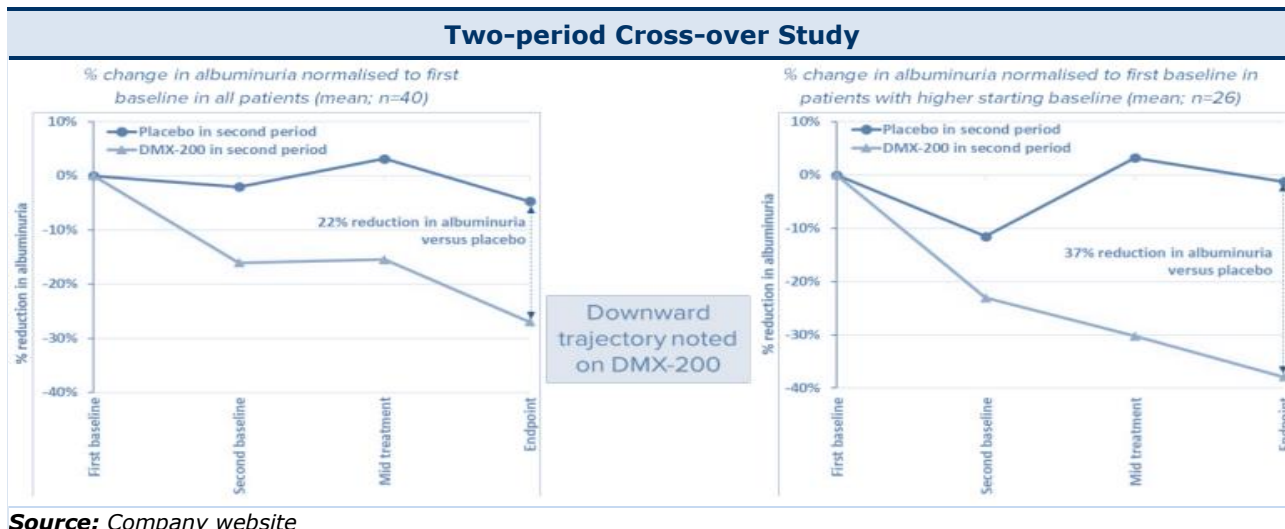
The Phase 2 study was a double-blind, randomised, placebo-controlled, crossover study designed to evaluate the safety and efficacy of DMX-200 in patients with diabetic kidney disease who are receiving a stable dose of standard of care, irbesartan. Each participant in the study received 12 weeks DMX-200 and 12 weeks placebo, separated by a 6-week washout period.



The results showed 30% of all patients ended the study below the albuminuria (a type of protein found in the urine) threshold for diabetic kidney disease diagnosis (<30mg/mmol), although statistical significance was not observed in the reduction in albuminuria on DMX-200 versus placebo.

An exploratory subgroup analysis was conducted in patients during the second treatment period of the crossover study, where a 37% reduction in albuminuria in patients receiving DMX-200 versus placebo in those patients with a starting albuminuria baseline greater than 500 mg/g (38% reduction versus baseline; n=26). A 22% mean reduction in albuminuria was observed in patients on DMX-200 versus placebo when normalised to first baseline (27% reduction versus baseline; n=40).

Importantly, these reductions in albuminuria are in addition to any reduction that occurred on the background therapy of an angiotensin receptor blocker. At the end of the study, it was noted that albuminuria levels appeared to be continuing to trend downwards at the end of both DMX-200 treatment periods, which also suggests greater albuminuria reductions may be observed with a longer study treatment duration. This is consistent with effects seen in other late-stage clinical studies and in the previous Dimerix study of DMX-200 in patients with diabetic kidney disease completed in 2017.



The Medical Advisory Board concluded that these encouraging data support the ongoing development of DMX-200 in diabetic kidney disease, and based on the Phase 2 data, a further study assessing the effect of DMX-200 in diabetic kidney disease patients over a longer period is warranted.

Dimerix has entered into an agreement with Australian Centre for Accelerating Diabetes Innovations (ACADI) to conduct clinical trial of DMX-200 in diabetic kidney disease patients and is expected to commence in the fourth quarter of 2022.

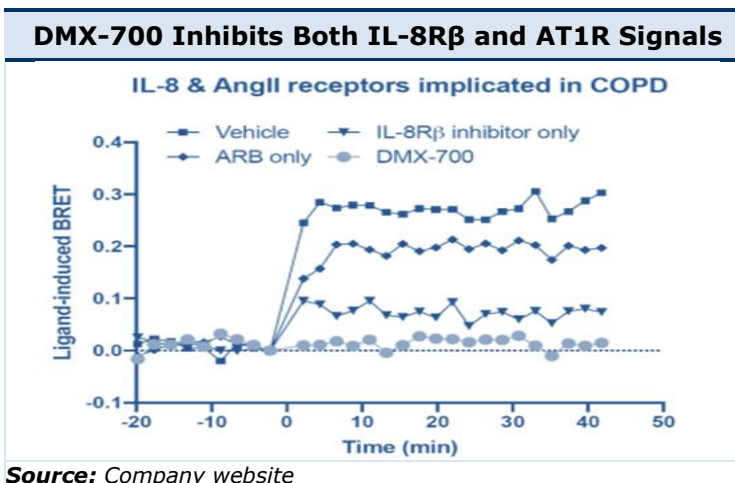
**Respiratory complications associated with COVID-19:** Dimerix’s DMX-200 drug candidate was selected for inclusion in two different global studies: REMAP-CAP for treating patients with COVID-19 pneumonia; and CLARITY 2.0 for treating COVID-19 patients with less severe respiratory complications. Dimerix proactively supports both studies driven by the REMAP-CAP and CLARITY 2.0 teams by providing them information for regulatory submissions and by supplying DMX-200 to the study sites.

On June 27, 2022, the Company announced that REMAP-CAP study has stopped the recruitment of Covid-19 patients to the ACE2 RAS Domain clinical study. The closure of non-critically ill patients was preceded by the closure of critically ill patients. The closure reflects the REMAP-CAP International Steering Committee’s belief that it would be challenging to recruit more patients given the dropping hospitality rates of Covid-19 patients globally. Additionally, the Company is expecting results from the Clarity 2.0 tests by the end of September 2022.

## 2. DMX-700

Dimerix is developing DMX-700 as a drug candidate for COPD, a progressive lung disease, using its proprietary identification and characterization technology. DMX-700 has been shown to block Interleukin 8 receptor beta (IL-8R $\beta$ , also known as CXCR2) and angiotensin II receptor type 1 ("AT1R") that have been independently implicated in the pathophysiology of COPD. Novel findings on molecular pharmacology profiling, using several techniques including using Receptor-HIT, have demonstrated that the DMX-700 drug candidate abolished

receptor signalling involved in neutrophil recruitment. IL-8 is produced by epithelial cells, airway smooth muscle cells and endothelial cells, and in many chronic inflammatory diseases including COPD, is expressed at elevated levels leading to abnormal recruitment of neutrophils that cause damage to the lung tissue. Prior studies have shown that inhibiting signalling of IL-8R $\beta$  reduces neutrophil movement and subsequently reduces mucus production and inflammation in COPD. The DMX-700 development plan continues to progress towards the clinical phase, with in vivo assessment in an appropriate COPD model to confirm in vitro observations in relevant pre-clinical models of the disease. The components of DMX-700 have a known safety profile in human studies, meaning an accelerated clinical development path can be pursued once in vivo efficacy is demonstrated.



On July 4, 2022, Dimerix released new data showing strong efficacy of DMX-700 in a preclinical model of COPD. DMX-700 was tested on mice using an oral dose in the PPE model of COPD and the results showed 80% reduction in the PPE induced lung injury, with a p value of 0.01. Additionally, inhibiting only AT1R or IL-8R $\beta$  individually had no statistically significant effect on lung injury induced by PPE. The Company assessed three different IL-8R $\beta$  inhibitors with an AT1R inhibitor in the pre-clinical model, with all three IL-8 $\beta$  inhibitors demonstrating strong efficacy outcomes and all of them are covered by Dimerix intellectual property. The Company has identified further intellectual property and an additional patent application is in progress.

DMX-700 has the option of moving directly into clinical studies (subject to regulatory approval) as the individual compounds used in the development of DMX-700 have a known safety profile in human studies. Dimerix plans to initiate the clinical trial soon along with further required nonclinical studies. The first clinical study is expected to commence in the first half of 2023.

## 3. Receptor-HIT

The Receptor-HIT proprietary assay is a novel technique which is developed to enable identification and pharmacological profiling of two GPCRs that act together as heteromers when activated by a ligand.

GPCRs are present within the cell membrane, that mediate most of our physiological responses to hormones, neurotransmitters, and environmental stimulants, and hence they are a potential therapeutic target for a broad spectrum of diseases. GPCRs are the largest family of receptors, and

there are over 1,000 of these receptors in the human body. Each GPCR is specific to a particular function and cell type and can regulate many different bodily functions and systems (i.e., reproduction, the endocrine and immune systems, pain, anti-inflammatory, growth, sense of smell, of taste, vision and behavioral attributes). As a result, GPCRs are the target for 30% to 50% of all modern drugs, and this list is growing.

## Patents

Dimerix has multiple granted patents for its products under development in numerous geographies with additional patents being filed based on the stage of drug development and overall commercialization strategy.

Dimerix has been granted the following patents for DMX-200:

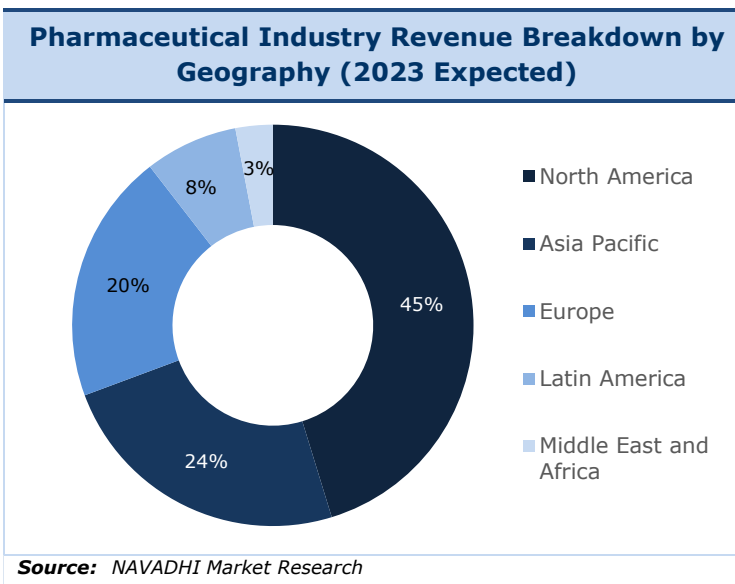
	United States	European Union
<b>Method of Use</b>	Any CCR2 inhibitor with any ARB for any kidney disease	DMX-200 with irbesartan
<b>Expiry</b>	2033	2032
<b>Granted Patent Numbers</b>	US 9,314,450 US 10,058,555 US 10,525,038	EP 2663304
<b>Orphan Exclusivity</b>	7 years	10 years

Dimerix has also secured ownership of DMX-200 by lodging two international PCT patent applications for the use of any CCR2 inhibitor in respiratory complications, including for COVID-19 as well as other causes. The new PCT patent applications were filed in the US in May 2021, and if granted, would expire post 2041. Dimerix has a method of use patent for DMX-700 and Freedom-To-Operate status. The Company has also lodged a PCT patent application for DMX-700 in September 2020, and once granted, would expire post 2040.

## Industry Analysis

### Global Pharmaceutical Industry

The global pharmaceutical industry comprises of companies that discover, develop, manufacture, and market goods and services that are used in treating diseases. The global pharmaceutical market was valued at USD 1.2 trillion in 2020 and is expected to reach USD 1.7 trillion in 2025, at a CAGR of 8%.<sup>vii</sup> This growth is expected due to resurgence in operations aided by gradual ease of COVID-19 related lockdown restrictions. Further, improved access to quality healthcare, increasing purchasing power of middle-class families across the globe, aging and growing population, and emergence of new diseases are expected to fuel the growth of the global pharmaceutical market. Geographically, North America was leading the global pharmaceuticals market in terms of revenue and in 2023, it is expected to have a global market share of 45.3%, followed by Asia Pacific at 24.1%, Europe at 20.2%, Latin America at 7.5%, and Middle East and Africa at 3.0%.<sup>viii</sup>



Source: NAVADHI Market Research

### Global FSGS Therapeutics Market

Human kidney contains numerous small filter units named glomerulus, which are made up of cluster of small blood vessels called glomeruli. FSGS is a rare kidney disease in which the immune system attacks some of the glomeruli of a glomerulus causing scars in glomeruli. Due to scarring these filter units start to malfunction as a result protein which were supposed to be retained in the blood are lost in the urine, while excess fluid may be retained leading to swelling of filter units and improper filtration of blood. This might cause permanent kidney damage or even kidney failure, higher blood pressure, and higher cholesterol.<sup>ix</sup>

The global FSGS market was estimated at USD 9.0 billion in 2020 and is expected to reach USD 14.1 billion by 2027, growing at a CAGR of 6.6%.<sup>x</sup> According to Nephcure, in the US alone more than 60% of the patients suffering from FSGS kidney disease do not receive proper treatment. As a result, around 50% of FSGS patients in the US face kidney failure, and only 5% of those who suffer kidney failure receive kidney transplant. However, in 30-50% of the cases, even after kidney transplantation, FSGS attacks the new kidney.<sup>xi</sup>

In the US, around 40 million adults, constituting 15% of the adult population, had kidney disease in 2021.<sup>xii</sup> Further, the overall Medicare cost for patients with chronic kidney disease was USD 87.2 billion, and treating patients with end-stage renal disease cost an additional USD 37.3 billion.<sup>xiii</sup> In 2019, the US White House Executive Order issued incentives for physicians to delay patient progression to renal failure as a priority.<sup>xiv</sup> This development in the US along with FDA approval for accepting surrogate endpoints such as proteinuria and eGFR as registration endpoints in kidney diseases is fuelling the growth of the US FSGS market.<sup>xv xvi xvii xviii</sup>

## Global Diabetic Nephropathy Therapeutics Market

Diabetic nephropathy also called diabetic kidney disease is a complication of type 1 and type 2 diabetes. The kidney's function is to filter wastes and extra water out of blood to make urine. However, patients with long-term diabetes can often suffer from damage to their kidney's blood vessel clusters that are responsible for this filtration. As a result, they retain excess fluid and lose albumin (which is supposed to be retained in the blood) through urine. This malfunctioning increases their blood pressure, causing further kidney damage and culminating in kidney failure or end-stage renal disease.<sup>xxix</sup>

The global Diabetic Nephropathy market is estimated to increase from USD 2.5 billion in 2021 to USD 3.3 billion by 2028 at a CAGR of 4.3%.<sup>xxx</sup> According to International Diabetes Federation, in 2021 there were around 537 million people of age group 20-79 years living in the world with diabetes. This number is expected to grow to 643 million by 2030 and 783 million by 2045.<sup>xxxi</sup> Moreover, Center for Disease Control and Prevention reported that 1 in every 3 adults with diabetes has diabetic kidney disease and every day around 170 people with diabetes begin treatment for kidney failure.<sup>xxxi</sup>

## Global Pneumonia Therapeutics Market

Pneumonia is an acute respiratory infection that is generally caused by viruses or bacteria. In response to the infection, the defense mechanism of the body accumulates pus in the alveoli. The pus contains certain proteins and cells, which are essential in killing microbes to overcome infection. However, the pus can also damage the lung cell and create difficulties in breathing as well as the exchange of gases between lung and blood. Over accumulation of pus can cause severe damage to lung and may cause breathing problems.<sup>xxxi</sup>

The Pneumonia Therapeutics industry generated a revenue of USD 12.5 billion in 2020 and is expected to reach USD 25.5 billion by 2030, growing at a CAGR of 8.5%.<sup>xxxi</sup> Rising awareness related to respiratory health complications, especially community-acquired pneumonia in younger individuals, and a surge in research and development for the treatment of COVID-19-related pneumonia is expected to fuel the growth of the market in the coming years.

## Key Growth Drivers

- 1. Introduction of more drugs into market due to an increase in global R&D pipeline:** The average global R&D pipeline in the pharmaceutical market was around 15,535 for the period 2016-2020. In 2021 the global R&D pipeline has witnessed an increase of around 18.9% to reach 18,471.<sup>xxxi</sup> The development of a new drug is usually risky as it is highly capital intensive, time-consuming, and has a low probability of success. On average, it takes over USD 2.6 billion and 12-15 years for a company to get a new drug from laboratory to market.<sup>xxxi</sup> A study from MIT showed that in the US only 14% of all the drugs in clinical trials succeeded and get approved by FDA.<sup>xxxi</sup> Due to the increase in the global R&D pipeline more drugs are expected to reach the market which would drive the pharmaceutical market in the future.
- 2. Increased prevalence of chronic diseases:** Modern lifestyle is accompanied by high stress level, lack of physical activity, consumption of alcohol and tobacco, and unhealthy food habits, which increased the prevalence of chronic diseases. In 2005 World Health Organization estimated that 61% of all deaths and 49% of all diseases globally were attributed to chronic diseases, while in 2007 it was forecasted that by 2030 more than 70% of total deaths and 59% of all diseases globally would be due to chronic diseases.<sup>xxxi</sup> However, as per April 2021 World Health Organization ("WHO") report, chronic diseases will cause 41 million deaths each year, equivalent to 71% of all



deaths globally.<sup>xxix</sup> This indicates that chronic diseases are growing at a pace higher than expected and hence will contribute to the growth of the pharmaceutical industry.

- 3. Increasing patient pool due to aging population:** In the year 2020, part of the population aged 60 years and above was estimated to be around 1 billion. It is expected that the population of people aged 60 years and above would reach 1.4 billion by 2030 and 2.1 billion by 2050.<sup>xxx</sup> This increase in the geriatric population is propelling the growth of the pharmaceutical market, as people, 60 years and above, have low immunity levels and hence are more prone to illness and generally need higher recovery time.

## **Risk Profile Analysis**

Dimerix operates in an industry characterized by long and capital-intensive process of R&D and regulatory approvals, with a limited probability of successful commercialisation. The Company is currently at the pre-profit stage, and as such, it relies on external sources of capital to finance its routine operations and R&D. Given the nature of Dimerix's industry and its current lifecycle stage, we believe the Company is subject to the following key risks:

### **1. Competitive Risks**

Dimerix's lead product candidate DMX-200 for FSGS is an adjunct therapy with no on-market competitors or potential competitors in advanced trial phases. The only other noteworthy FSGS treatment that is currently in Phase 3 trials is Travele Therapeutics' novel small-molecule candidate Sparsentan. However, this product candidate is a potential complement to DMX-200 rather than a competitor for the treatment of FSGS. FSGS attacks the filtering units of the kidney, called glomeruli, and triggers a feedback loop via three steps which make the disease progressive and re-occurring. Step 1 involves hyperfiltration of and hypertension within blood vessels of the glomeruli. Step 2 involves inflammatory cell infiltration of the kidneys and subsequent fibrosis. Step 3 involves loss of specialized cells called Podocytes which cannot regenerate from the glomeruli. Certain kidney cells express both receptors and so using one receptor blocker, such as Travele Therapeutics' drug candidate, does not block activation and results in only partial response. Blocking both AT1R and CCR2 pathways reduces proteinuria, protects podocytes and prevents glomerulosclerosis. As such, the only other noteworthy, advanced trial stage treatment candidate is expected to complement DMX-200 and not compete with it. For this reason, we believe that Dimerix has a LOW competitor risk profile.

### **2. Third-Party Risks**

Dimerix relies significantly on collaborations and partnerships with third parties such as academic institutes, pharmaceutical and biotechnology companies at almost all stages of its product development for multiple activities, including research and development, clinical testing, manufacturing, and commercialization. Although the Company has not faced any significant challenges with its partners until now, the Company is exposed to a moderate amount of risk in case of disruptions from the partners' end.

Dimerix outsources its clinical trials to Contract Research Organisations (CROs) to complete all phases of clinical development as quickly as possible, so that its products can be submitted for approval in a timely manner, thereby giving them an edge over its competitors. However, the potential failure of the CRO to produce clinical data that is of acceptable quality to the FDA and other regulatory authorities can lead to more time and expense for the Company. The additional time and cost to redo some or all aspects of the clinical research for any specific drug can delay the product launch, which can result in missing the first to market opportunity and potential loss of sales. For these reasons, we believe that Dimerix has a MEDIUM third-party risk profile.

### **3. Personnel Risk**

Dimerix's leadership team is knowledgeable and has decades of experience in the pharmaceutical industry. The Company operates on a lean model where all management team members are 'core members' who bring unique capabilities and handle key strategic aspects of the business. All non-core aspects are outsourced to reliable partners and placed under the supervision of relevant management team members. Each team member plays an important role, and everyone has distinguished

capabilities. Loss of key team members could affect the Company and slow down certain initiatives. We, therefore, believe that the Company has a MEDIUM key personnel risk.

#### **4. Financing Risk**

Dimerix is currently at the pre-profit stage. However, it has a sufficient cash balance to meet its routine operations and finance R&D activities for its multiple late-stage product indications. The Company is expected to start generating significant royalty revenue in FY 2025, which is the estimated timeline to commercialize DMX-200 for FSGS. Further, in later years, the Company is expected to augment its revenue potential as additional royalties from its other programs start kicking in which will further boost its revenue potential. Therefore, the Company's cash balance is expected to remain sufficient to meet its liquidity requirements in the coming years, as it fast tracks the clinical trials and regulatory application processes for DMX-200, as well as enters into contract manufacturing partnerships once DMX-200 is approved by the US FDA. The Company has successfully raised capital in the past on the strength of its products under development. However, any delay in the drug approval process can potentially lead to significant cost overrun and can hamper the growth prospects of the Company. For these reasons, we believe that Dimerix has a MID-HIGH financing risk profile.

#### **5. Intellectual Property Rights Risks**

Dimerix has patent protected its lead clinical product candidate and the filing of patents for pipeline products is also under way. Also, Dimerix has received Orphan Drug Designation which provides 10 years and 7 years exclusivity periods in the US and the UK respectively, during which the Company's patent cannot be challenged and generic drugs cannot enter the market. Although patents once granted are infrequently revoked or invalidated, the grant of a patent does not guarantee its validity and enforceability in the future. A patent becoming invalid or unenforceable could directly impact the development and marketing of the corresponding product and significantly affect the Company's revenue and market position. Further, it can be difficult to enforce intellectual property rights in certain geographies and competitors can quickly emerge in such places. Despite being exposed to these potential risks, we believe that such infringement occurrences are relatively low and Dimerix has a LOW intellectual property rights risk.

#### **6. Regulatory Risks**

Dimerix's flagship drug candidate is DMX-200 for the treatment of FSGS, which is a rare disease with no existing registered treatment options available anywhere in the world. Besides, the historical lack of adequate public policy initiatives and incentive measures has contributed to high costs and poor health outcomes for kidney disease patients. This led to a drastic overhaul in the public health policy over the course of the past 2 years, which includes workshops and regulatory acceptance of surrogate endpoints in trials of kidney disease to fast-track the clinical trials of FSGS. Further key changes in US Federal policy and rapid adoption of treatment guidelines have contributed to a sea change in the management of renal disease and established a clear development pathway for treatments of FSGS. Hence, Dimerix is less likely to face any regulatory hurdles in registering its drug candidates once

The regulatory requirements are different in each of these countries and some of these countries may require additional clinical trials. In some cases, Dimerix may also have to look for suitable local partners if the regulations require them to do so. Getting regulatory approval in every country of operation is an important hurdle that the Company will have to cross. We, therefore, believe that Dimerix's has MEDIUM regulatory risk.

## Financial Analysis

### Revenue and Profitability

Dimerix is a pre-profit company, and its lead asset DMX-200 is now at Phase 3 clinical stage of product development. Dimerix has no operating revenue as on date and is currently investing significantly on product development and trials. The Company is expected to generate significant royalty income starting FY 2025 when DMX-200 is scheduled to become commercially available in the US market for FSGS patients, provided that the drug is approved by the US FDA. This will result in the Company becoming EBITDA positive in FY 2025 and its Revenue and Net Income are projected to be AUD 34.1 million and AUD 23 million (67.9% Net Margin) respectively in the same financial year. Further, the Company is expected to augment its revenue potential as additional royalties from its other programs start kicking in. As such, the Company's Revenue and Net Income are projected to reach AUD 324 million and AUD 238 million (73.4% Net Margin) respectively in FY 2033, when the patent period of DMX-200 is set to expire.

### R&D Expenses

Dimerix incurred an R&D Expenses of AUD 9.3 million in FY 2021 and AUD 5.2 million in the first half of FY 2022. Over the following years, the R&D Expenses are projected to decline as the Company starts to commercialize its products. Besides, Dimerix receives R&D tax incentive payments from the Australian Government as well as government grants from the Australian Government's Medical Research Future Fund (MRFF). These tax incentives and grants help in alleviating the Company's overall cost burden of R&D activities.

### Corporate Administration Expenses

Dimerix's Corporate Administration Expenses was AUD 1.4 million in FY 2021 and AUD 434,697 in the first half of FY 2022. The Company's Corporate Administration Expenses are projected to rise, primarily driven by inflation, and reach AUD 2.4 million in FY 2033, when the patent period of DMX-200 is set to expire. Since the Company is pursuing an asset light business model by outsourcing its R&D and manufacturing activities to external partners, its administration costs are expected to remain proportionately low.

### Capital Structure

The Company had no borrowings on its books as on March 31, 2021. The Company claims to be well capitalized to support clinical trials of its two late-stage product indications – FSGS and respiratory complications associated with COVID-19. This is reflected in the available cash balance of AUD 9.6 million as on June 30, 2022 (AUD 16.8 million as on March 31, 2022). The reduction in cash balance is due to clinical trial start-up costs incurred in the quarter for the Phase 3 FSGS Study. Further, the Company completed equity raise of AUD 24 million till the end of Q3'22. The Company is not expected to raise additional capital, provided that it is able to meet the expected timeline for commercialization of its multiple product indications.

## Historical Income Statement

<i>(All figures are in AUD)</i>	FY 2018	FY 2019	FY 2020	FY 2021	H1 2022
<b>Revenue</b>	<b>825,104</b>	<b>1,429,282</b>	<b>2,421,536</b>	<b>4,554,926</b>	<b>145,423</b>
<i>YoY Growth</i>	-	73.2%	69.4%	88.1%	-
<b>Operating Costs</b>					
Research and Development Expenses	2,445,350	2,837,027	5,537,528	9,332,356	5,241,129
<i>%age of Revenue</i>	296.4%	198.5%	228.7%	204.9%	204.9%
Administrative Expenses	1,412,388	1,260,764	1,198,582	1,352,177	434,697
<i>%age of Revenue</i>	171.2%	88.2%	49.5%	29.7%	29.7%
Share-based Payment to Advisors	-	-	-	-	808,848
<i>%age of Revenue</i>	0.0%	0.0%	0.0%	0.0%	556.2%
Share-based Payment Expenses	300,854	231,143	129,280	35,969	104,711
<i>%age of Revenue</i>	36.5%	16.2%	5.3%	0.8%	0.8%
Depreciation	6,422	4,677	13,529	44,601	23,358
<i>%age of Revenue</i>	0.8%	0.3%	0.6%	1.0%	16.1%
<b>Total Operating Costs</b>	<b>4,165,014</b>	<b>4,333,611</b>	<b>6,878,919</b>	<b>10,765,103</b>	<b>6,612,743</b>
<i>%age of Revenue</i>	504.8%	303.2%	284.1%	236.3%	4547.2%
<b>Operating Income / (Loss)</b>	<b>(3,339,910)</b>	<b>(2,904,329)</b>	<b>(4,457,383)</b>	<b>(6,210,177)</b>	<b>(6,467,320)</b>
<i>%age of Revenue</i>	-404.8%	-203.2%	-184.1%	-136.3%	-136.3%
Net Financial Expense	(20,184)	(18,108)	36,770	161,557	(420)
<i>%age of Revenue</i>	-2.4%	-1.3%	1.5%	3.5%	-0.3%
Income Tax Expense	-	-	-	-	-
<b>Net Income / (Loss)</b>	<b>(3,319,726)</b>	<b>(2,886,221)</b>	<b>(4,494,153)</b>	<b>(6,371,734)</b>	<b>(6,466,900)</b>
<i>%age of Revenue</i>	-402.3%	-201.9%	-185.6%	-139.9%	-4447.0%

## Historical Balance Sheet

<i>(All figures are in AUD)</i>	FY 2018	FY 2019	FY 2020	FY 2021	H1 2022
<b>ASSETS</b>					
<b>Current Assets</b>					
Cash & Cash Equivalents	6,284,322	3,563,286	7,785,706	5,250,094	16,267,353
R&D Tax Incentive Receivable	825,104	1,180,759	2,338,254	3,695,562	3,818,718
Prepayments	76,491	99,773	107,639	118,550	426,353
Trade & Other Receivables	78,391	94,207	125,827	312,253	-
Right-of-use Assets	-	-	30,353	42,823	19,465
<b>Total Current Assets</b>	<b>7,264,308</b>	<b>4,938,025</b>	<b>10,387,779</b>	<b>9,419,282</b>	<b>20,531,889</b>
<b>Non Current Assets</b>					
Property, Plant and Equipment	391	2,620	1,232	1,422	5,698
<b>Total Non Current Assets</b>	<b>391</b>	<b>2,620</b>	<b>1,232</b>	<b>1,422</b>	<b>5,698</b>
<b>TOTAL ASSETS</b>	<b>7,264,699</b>	<b>4,940,645</b>	<b>10,389,011</b>	<b>9,420,704</b>	<b>20,537,587</b>
<b>LIABILITIES &amp; EQUITY</b>					
<b>LIABILITIES</b>					
<b>Current Liabilities</b>					
Trade Payables	364,443	719,379	1,505,457	2,793,858	2,008,926
Provisions	42,301	18,389	29,958	65,254	87,649
Borrowings	-	-	1,063,015	5,050,000	-
Lease Liabilities	-	-	31,317	43,093	19,834
<b>Total Current Liabilities</b>	<b>406,744</b>	<b>737,768</b>	<b>2,629,747</b>	<b>7,952,205</b>	<b>2,116,409</b>
<b>TOTAL LIABILITIES</b>	<b>406,744</b>	<b>737,768</b>	<b>2,629,747</b>	<b>7,952,205</b>	<b>2,116,409</b>
<b>EQUITY</b>					
Issued Capital	20,287,429	20,474,930	28,344,114	28,389,114	50,895,134
Share-based Payments Reserve	625,985	669,627	850,983	886,952	1,800,511
Accumulated Losses	(14,055,459)	(16,941,680)	(21,435,833)	(27,807,567)	(34,274,467)
<b>TOTAL EQUITY</b>	<b>6,857,955</b>	<b>4,202,877</b>	<b>7,759,264</b>	<b>1,468,499</b>	<b>18,421,178</b>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>7,264,699</b>	<b>4,940,645</b>	<b>10,389,011</b>	<b>9,420,704</b>	<b>20,537,587</b>

## Income Statement Summary – Our Estimated Projections

<i>(All figures are in AUD)</i>	2022P	2023P	2024P	2025P	2026P	2033P
<b>Revenue</b>	<b>3,199,032</b>	<b>3,333,336</b>	<b>4,937,925</b>	<b>34,168,851</b>	<b>48,730,816</b>	<b>323,906,796</b>
<i>YoY Growth</i>	-29.8%	4.2%	48.1%	592.0%	42.6%	4.7%
<b>Operating Income / (Loss)</b>	<b>(5,730,182)</b>	<b>(6,272,384)</b>	<b>(2,551,829)</b>	<b>31,341,972</b>	<b>45,815,360</b>	<b>321,476,625</b>
<i>%age of Revenue</i>	-179.1%	-188.2%	-51.7%	91.7%	94.0%	99.2%
<b>Net Income / (Loss)</b>	<b>(5,730,182)</b>	<b>(6,272,384)</b>	<b>(2,551,829)</b>	<b>23,193,059</b>	<b>33,903,367</b>	<b>237,892,702</b>
<i>%age of Revenue</i>	-179.1%	-188.2%	-51.7%	67.9%	69.6%	73.4%
<b>EPS</b>	<b>(0.02)</b>	<b>(0.02)</b>	<b>(0.01)</b>	<b>0.07</b>	<b>0.11</b>	<b>0.74</b>
<i>YoY Growth</i>	-	-9.5%	59.3%	1008.9%	-46.2%	4.7%

## Balance Sheet – Our Estimated Projections

<i>(All figures are in AUD)</i>	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2033
<b>ASSETS</b>						
<b>Current Assets</b>						
Cash & Cash Equivalents	17,613,548	11,011,003	8,794,651	33,188,148	67,103,421	1,079,002,609
R&D Tax Incentive Receivable	3,053,609	3,333,336	2,439,492	472,555	475,209	-
Prepayments	118,550	118,550	118,550	118,550	118,550	118,550
Trade & Other Receivables	312,253	312,253	312,253	312,253	312,253	312,253
Right-of-use Assets	42,823	42,823	42,823	42,823	42,823	1,856
<b>Total Current Assets</b>	<b>21,140,784</b>	<b>14,817,965</b>	<b>11,707,770</b>	<b>34,134,329</b>	<b>68,052,256</b>	<b>1,079,435,267</b>
<b>Non Current Assets</b>						
Property, Plant and Equipment	1,422	1,422	1,422	1,422	1,422	-
<b>Total Non Current Assets</b>	<b>1,422</b>	<b>1,422</b>	<b>1,422</b>	<b>1,422</b>	<b>1,422</b>	<b>-</b>
<b>TOTAL ASSETS</b>	<b>21,142,206</b>	<b>14,819,387</b>	<b>11,709,192</b>	<b>34,135,751</b>	<b>68,053,678</b>	<b>1,079,435,267</b>
<b>LIABILITIES &amp; EQUITY</b>						
<b>LIABILITIES</b>						
<b>Current Liabilities</b>						
Trade Payable	1,875,963	1,789,559	1,231,192	464,692	479,253	399,480
Provisions	65,254	65,254	65,254	65,254	65,254	65,254
Lease Liabilities	43,093	43,093	43,093	43,093	43,093	43,093
<b>Total Current Liabilities</b>	<b>1,984,310</b>	<b>1,897,906</b>	<b>1,339,539</b>	<b>573,039</b>	<b>587,600</b>	<b>507,827</b>
<b>TOTAL LIABILITIES</b>	<b>1,984,310</b>	<b>1,897,906</b>	<b>1,339,539</b>	<b>573,039</b>	<b>587,600</b>	<b>507,827</b>
<b>EQUITY</b>						
Issued Capital	50,895,134	50,895,134	50,895,134	50,895,134	50,895,134	50,895,134
Share-based Payments Reserve	1,800,511	1,836,480	1,836,480	1,836,480	1,836,480	1,836,480
Accumulated Losses	(33,537,749)	(39,810,133)	(42,361,962)	(19,168,903)	14,734,464	1,026,195,826
<b>TOTAL EQUITY</b>	<b>19,157,896</b>	<b>12,921,481</b>	<b>10,369,652</b>	<b>33,562,711</b>	<b>67,466,078</b>	<b>1,078,927,440</b>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>21,142,206</b>	<b>14,819,387</b>	<b>11,709,192</b>	<b>34,135,751</b>	<b>68,053,678</b>	<b>1,079,435,267</b>



## Valuation

Equity Value of Dimerix stands between **AUD 121.1 million and AUD 148.0 million**

Equity Value per share for Dimerix stands between **AUD 0.38 and AUD 0.46**

Valuation Approach	Variance	Equity Value as on 17-Aug-2022 (AUD)	Price per Share as on 17-Aug-2022 (AUD)
Downside Case	-10%	121,110,281	0.38
Base Case	0%	134,566,978	0.42
Upper Case	10%	148,023,676	0.46

### Important information on Arrowhead methodology

The principles of the valuation methodology employed by Arrowhead BID are variable to a certain extent, depending on the sub-sectors in which the research is conducted. But all Arrowhead valuation research possess an underlying set of common principles and a generally common quantitative process.

With Arrowhead commercial and technical due diligence, Arrowhead researches the fundamentals, assets and liabilities of a company, and builds estimates for revenue and expenditure over a coherently determined forecast period.

Elements of past performance such as price/earnings ratios, indicated as applicable, are mainly for reference. Still, elements of real-world past performance enter the valuation through their impact on the commercial and technical due diligence.

We have presented the rNPV and NPV analysis for the valuation of the three different indications of DMX-200 at various levels of development. The indications are FSGS, Diabetic Kidney Disease (DKD) and respiratory complications associated with COVID-19. We have also presented Comparable Company Analysis. The fair value bracket is built on the basis of these three methods.

### Arrowhead BID Fair Market Value Bracket

The Arrowhead Fair Market Value is given as a bracket. This is based on quantitative key variable analyses such as key price analysis for revenue and cost drivers or analysis and discounts on revenue estimates for projects, especially relevant to projects estimated to provide revenue near the end of the chosen forecast period. Low and high estimates for key variables are produced as a valuation tool.

In principle, an investor comfortable with the high brackets of our key variable analysis will align with the high bracket in the Arrowhead Fair Value Bracket, and, likewise, in terms of low estimates. The investor will also note the company intangibles to analyze the strengths and weaknesses, and other essential company information. These intangibles serve as supplementary decision factors for adding or subtracting a premium in investor's own analysis.

The bracket should be taken as a tool by Arrowhead BID for the reader of this report and the reader should not solely rely on this information to make his decision on any particular security. The reader must also understand that while on the one hand global capital markets contain inefficiencies, especially in terms of information, on the other, corporations and their commercial and technical positions evolve rapidly. This

present edition of the Arrowhead valuation is for a short to medium-term alignment analysis (one to twelve months).

## Estimation of Equity Value

Valuation Approach	Equity Value as on 17-Aug-2022 (AUD)	Price per share as on 17-Aug-2022 (AUD)	Weight (%)
rNPV Analysis	143,118,790	0.45	33%
NPV Analysis	138,285,000	0.43	33%
Comparable Company Analysis	122,658,023	0.38	34%
<b>Weighted Average Equity Value</b>	<b>134,566,978</b>	<b>0.42</b>	<b>100%</b>

Following are the valuation details for the three valuation approaches:

### 1. rNPV Analysis

- **Valuation Methodology:** The Arrowhead fair valuation for Dimerix is based on the rNPV analysis of developing drugs of the company.
- **Time Horizon:** The time chosen for the valuation is 12 years (2022 – 2033). The time period is selected on the basis of the patent protection period (until 2033 in the US) for various drugs.
- **Probability:** We have calculated the forecasted cashflows for various indications of DMX-200 by factoring their respective probabilities of approval based on the phases of clinical trials they are currently in. The following table states these probabilities:

Phase 1	Phase 2	Phase 3	Registration to Approval
75.1%	50.0%	58.6%	87.5%

For rNPV analysis, a discount rate that does not take business risk into consideration is used, as the risk is already captured in probable cash flows. For our model, we have assumed 15% discount rate.

<i>(All figures are in AUD)</i>	FY 2022	FY 2023	FY 2024	FY 2025	FY 2033
<b>FSGS</b>					
Cash Flows	(2,368,384)	(2,713,965)	(2,739,956)	28,199,745	249,983,201
Risk Adjusted Cash Flows	(2,368,384)	(2,713,965)	(1,605,614)	14,459,419	128,178,886
PV of Risk Adjusted Cash Flows as on 30-Jun-22	(2,059,465)	(2,052,148)	(1,055,717)	8,267,220	23,957,550
rNPV of DMX-200 for FSGS as on 30-Jun-22	155,600,020				
<b>rNPV of DMX-200 for FSGS as on 17-Aug-22</b>	<b>158,486,338</b>				
<b>DKD</b>					
Cash Flows	(417,950)	(478,935)	(483,522)	(460,136)	44,878,705
Risk Adjusted Cash Flows	(417,950)	(478,935)	(483,522)	(230,068)	11,505,778
PV of Risk Adjusted Cash Flows 30-Jun-22	(363,435)	(362,144)	(317,923)	(131,542)	2,150,512
rNPV of DMX-200 for DKD as on 30-Jun-22	9,659,679				
<b>rNPV of DMX-200 for DKD as on 17-Aug-22</b>	<b>9,838,862</b>				
<b>COVID-19</b>					
Cash Flows	(1,279,836)	(1,279,836)	2,498,432	5,496,551	29,044,891
Risk Adjusted Cash Flows	(1,279,836)	(749,984)	1,281,071	2,818,356	14,892,768
PV of Risk Adjusted Cash Flows 30-Jun-22	(1,112,901)	(567,096)	842,325	1,611,404	2,783,565
rNPV of DMX-200 for COVID-19 as on 30-Jun-22	24,198,105				
<b>rNPV of DMX-200 for COVID-19 as on 17-Aug-22</b>	<b>24,646,970</b>				

### rNPV Analysis

Indication	rNPV (AUD)	Per Share (AUD)
FSGS	158,486,338	0.49
Diabetic Kidney Disease	9,838,862	0.03
Covid-19	24,646,970	0.08
Unallocated Revenues and Costs	(55,103,474)	(0.17)
Add: Cash	5,250,094	0.02
<b>Equity Value</b>	<b>143,118,790</b>	<b>0.45</b>

## 2. NPV Analysis

- **Valuation Methodology:** The Arrowhead fair valuation for Dimerix is based on the NPV analysis of the three different product indications of the company.
- **Time Horizon:** The time chosen for the valuation is 12 years (2022 – 2033). The time period is selected on the basis of the patent protection period (until 2033 in the US) for DMX-200.

The valuation of Dimerix is based on the potential US market share that DMX-200 will capture when the drug is approved and launched in the market for the three indications: FSGS, Diabetic Kidney Disease and respiratory complications associated with COVID-19. Sale of DMX-200 in other territories outside the US is not considered at this point. Also, potential cash flow from Receptor-HIT platform and DMX-700 are not included in the valuation at this point. However, these assets are valuable because Receptor-HIT platform is commercially scalable, and DMX-700 is undergoing pre-clinical studies to support its entry into the clinical phase. For FSGS and respiratory complications associated with COVID-19, a higher discount rate of 25% compared to a normal discount rate of 15% for approved drugs, is used as DMX-200 is currently in Phase 3 clinical trials for these two indications and not yet approved. For valuation of DMX-200 for Diabetic Kidney Disease indication, an even higher discount rate of 40% is used as it is currently in Phase 2 development and farther away from the stage of being a developed drug.

<i>(All figures are in AUD)</i>		FY 2022	FY 2023	FY 2024	FY 2025	FY 2033
<b>FSGS</b>						
Cash Flows		(2,368,384)	(2,713,965)	(2,739,956)	28,199,745	249,983,201
PV of Cash Flows as on	30-Jun-22	(1,894,707)	(1,736,938)	(1,402,857)	11,550,616	17,178,715
NPV of DMX-200 for FSGS as on	30-Jun-22	147,587,872				
<b>NPV of DMX-200 for FSGS as on</b>	<b>17-Aug-22</b>	<b>151,982,996</b>				
<b>DKD</b>						
Cash Flows		(417,950)	(478,935)	(483,522)	(460,136)	44,878,705
PV of Risk Cash Flows	30-Jun-22	(298,536)	(244,355)	(176,210)	(119,777)	791,597
NPV of DMX-200 for DKD as on	30-Jun-22	5,169,534				
<b>NPV of DMX-200 for DKD as on</b>	<b>17-Aug-22</b>	<b>5,403,414</b>				
<b>COVID-19</b>						
Cash Flows		(1,279,836)	(1,279,836)	2,498,432	5,496,551	29,044,891
PV of Cash Flows	30-Jun-21	(1,023,869)	(819,095)	1,279,197	2,251,387	1,995,950
NPV of DMX-200 for COVID-19 as on	30-Jun-21	23,890,134				
<b>NPV of DMX-200 for COVID-19 as on</b>	<b>17-Aug-22</b>	<b>30,751,969</b>				

### NPV Analysis

Parameter	NPV (AUD)	Per Share (AUD)
FSGS	151,982,996	0.47
Diabetic Kidney Disease	5,403,414	0.02
Covid-19	30,751,969	0.10
Less: Unallocated Revenues and Costs	(55,103,474)	(0.17)
Add: Cash	5,250,094	0.02
<b>Equity Value</b>	<b>138,285,000</b>	<b>0.43</b>

### 3. Comparable Company Analysis

Listed Comparable Company Analysis method operates under the assumption that similar companies will have similar valuation multiples, such as Price/Book Value, EV/R&D expenses, and Price per Share/R&D expenses per Share. We have shortlisted companies similar in business with Dimerix based on parameters such as market size, regions of operations etc.

A list of available statistics for the companies was completed, and the Price/Book Value, EV/R&D expenses, and Price per Share/R&D expenses per Share multiples were calculated for each of the comparable companies. Since most of the data was not normalized, we have left outliers in our calculations. The weighted average of the resulting multiples was then calculated and used as benchmark for valuing Dimerix.

The weights allocated to the comparable companies were based on the degree of their business match with the subject company.

Relative Valuation based on	Weights	Equity Value as on 17-Aug-2022 (AUD)	Implied Share Price (AUD)
<b>P/B</b>	50%	146,577,007	0.46
<b>EV/R&amp;D Expenses</b>	25%	97,691,309	0.30
<b>P/R~</b>	25%	99,786,771	0.31
<b>Weighted Average</b>	<b>100%</b>	<b>122,658,023</b>	<b>0.38</b>

~ P/R: Price per Share / R&D Expense per Share

Stock Exchange	Ticker	Company Name	Business Match %	P/B	EV/R&D	P/R&D Expense
ASX	PXS	Pharmaxis Ltd	80%	14.5	6.0	8.6
ASX	ANP	Antisense Therapeutics Ltd	80%	12.8	13.7	15.0
ASX	BNO	Bionomics Ltd	75%	1.5	7.3	12.2
ASX	OPT	Opthea Ltd	75%	2.5	8.6	13.2
ASX	NEU	Neuren Pharmaceuticals Ltd	65%	17.6	68.5	72.4
NDAQ	PHAS	PhaseBio Pharmaceuticals, Inc.	60%	0.6	0.2	0.6
NDAQ	SELB	Selecta Biosciences, Inc.	60%	16.5	4.1	5.4

Stock Exchange	Ticker	Company Name	Business Match %	P/B	EV/R&D	P/R&D Expense
NDAQ	RETA	Reata Pharmaceuticals, Inc.	45%	3.9	0.8	4.6
NDAQ	TVTX	Traverse Therapeutics, Inc.	40%	6.0	8.9	8.6
NDAQ	KDNY	Chinook Therapeutics, Inc.	50%	3.1	12.7	14.6
<b>Median</b>				<b>4.9</b>	<b>8.0</b>	<b>10.4</b>
<b>Mean without Outliers</b>				<b>7.1</b>	<b>8.8</b>	<b>10.3</b>
<b>Weighted Average without Outliers</b>				<b>8.0</b>	<b>8.7</b>	<b>10.7</b>
<b>ASX</b>	<b>DXB</b>	<b>Dimerix Limited</b>		<b>2.8</b>	<b>3.8</b>	<b>5.5</b>

## Analyst Certifications

I, Aditya Ahluwalia, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security and the subject company, based on the collection and analysis of public information and public company disclosures.

### Important disclosures

Arrowhead Business and Investment Decisions, LLC received fees in 2022 and will receive further fees in 2022 from Dimerix Limited for researching and drafting this report and for a series of other services to Dimerix Limited, including distribution of this report, investor relations and networking services. Neither Arrowhead BID nor any of its principals or employees own any long or short positions in Dimerix Limited. Arrowhead BID's principals intend to seek a mandate for investment banking services from Dimerix Limited in 2022 or beyond and may receive compensation for investment banking services from Dimerix Limited in 2022 or beyond.

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Any opinions expressed in this report are statements of our judgment to this date and are subject to change without notice.

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objectives and financial situation utilizing their own financial advisors as they deem necessary. Investors are advised to gather and consult multiple information sources before making investment decisions. Recipients of this report are strongly advised to read the information on Arrowhead Methodology section of this report to understand if and how the Arrowhead Due Diligence and Arrowhead Fair Value Bracket integrate alongside the rest of their stream of information and within their decision-making process.

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## Appendix

### Glossary

ARDS	Acute Respiratory Distress Syndrome
AT1R	Angiotensin II Type I Receptor
ACADI	Australian Centre for Accelerating Diabetes Innovations
BTB	Biomedical Translation Bridge
CCR2	C-C Chemokine Receptor Type 2
COPD	Chronic Obstructive Pulmonary Disease
CRO	Contract Research Organisation
DKD	Diabetic Kidney Disease
EMA	European Medicines Agency
FDA	Food and Drug Administration
FSGS	Focal Segmental Glomerulosclerosis
GPCR	G-Protein Coupled Receptors
IND	Investigational New Drug
MHRA	Medicines and Healthcare products Regulatory Agency
MRFF	Medical Research Future Fund
PCT	Patent Cooperation Treaty
SARS	Severe Acute Respiratory Syndrome
UWA	University of Western Australia



## Notes and References

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