Capital Raising Presentation

Gary Phillips CEO

Monday 6 August 2018

Forward looking statement

This document contains forward-looking statements, including statements concerning Pharmaxis' future financial position, plans, and the potential of its products and product candidates, which are based on information and assumptions available to Pharmaxis as of the date of this document. Actual results, performance or achievements could be significantly different from those expressed in, or implied by, these forward-looking statements. All statements, other than statements of historical facts, are forward-looking statements. These forward-looking statements are not guarantees or predictions of future results, levels of performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this document. For example, despite our efforts there is no certainty that we will be successful in partnering our LOXL2 program or any of the other products in our pipeline on commercially acceptable terms, in a timely fashion or at all. Except as required by law we undertake no obligation to update these forward-looking statements as a result of new information, future events or otherwise.

Capital Raising Overview

Pharmaxis is raising A$24.0m at A$0.325 per share via a Two Tranche Placement

- Two Tranche Placement to sophisticated and professional investors
  - Tranche 1 raising A$12.4m under existing placement capacity pursuant to ASX Listing Rule 7.1
  - Tranche 2 raising A$11.6m subject to a shareholder approval
  - A$0.325 issue price represents a 3.1% premium to the last closing price of A$0.315

- Use of funds
  - Strengthen balance sheet to assist with LOXL2 partnering negotiations expected to occur in 2H18. A$54m pro-forma cash balance (30 June 2018 post raising)
  - Further investment in pre-clinical programs
  - General working capital and capital raising costs

- Strong support from new and existing substantial shareholders
  - Arix Bioscience PLC a specialist global biotech investor committing A$14.2m to take a 11.1% stake post capital raising
  - BVF Partners LP committing A$7.0m to increase their shareholding to approximately 22.9% of company post capital raising

Capital Raising Timetable

An indicative timetable for the capital raising is provided below

Trading halt	**Friday 3 August 2018**
Placement announced and Company resumes trading	**Monday 6 August 2018**
Settlement of issue of Placement Shares under Tranche 1	**Monday 13 August 2018**
Allotment of issue of Placement Shares under Tranche 1	**Tuesday 14 August 2018**
Special Meeting for approval of issue of Placement under Tranche 2	**On or around Mid September 2018**
Settlement of Placement under Tranche 2 (subject to approval)	**On or around Mid September 2018**
Allotment of Placement under Tranche 2 (subject to approval)	**On or around Mid September 2018**

*The timetable above is indicative only and may be varied subject to the ASX Listing Rules

Business Overview

Pharmaxis has a successful track record of research, development and commercialisation of human healthcare products for the treatment and management of fibrotic and inflammatory diseases

Clinical Trials

- Utilise global experience and extensive clinical networks to execute value adding Phase 1 and 2 clinical trials

Drug Discovery Engine

- Leverage small molecule expertise and in house chemistry platform
- Efficiencies from global academic & CRO networks
- Target high value diseases with validated targets

Value Generation

- Extensive Big Pharma network
- Seek to partner after phase 1 or 2 to realise value and mitigate program and corporate risk

Pharmaxis overview

A globally recognised leader in drug development for fibrosis & inflammation

- A chemistry platform that has delivered a pipeline of oral small molecule drugs in preclinical and clinical development in diseases with large markets and high unmet need
- A **globally respected** translational **development team** delivering **best in class** drug development programs with international standard data packages
- A proven **track record** of achieving global partnering deals with multinational Pharmaceutical companies
- $83m received to date from benchmark deal concluded with Boehringer Ingelheim in 2015 and worth a potential $600m+ in development milestones for two indications (NASH and diabetic retinopathy) plus sales related payments (% and milestones)
- Commercial partnering process for phase 1 anti fibrotic LOXL2 inhibitor program expected Q4 2018
- Growing revenues from approved product sales (26% increase for FY 2018 to A$6.1m) & milestones (A$42m FY 2018)
- Strong balance sheet - A$31m cash at June 2018
- Purpose built manufacturing and research facility in Sydney
- Strong institutional share register; including offshore specialist biotech funds

Senior management

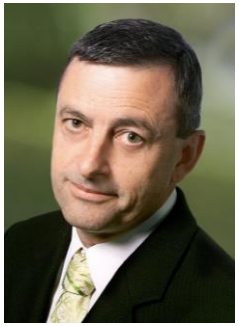
Significant experience in drug development, commercialisation and partnering

Gary Phillips – CEO

- more than 30 years of operational management experience in the pharmaceutical and healthcare industry in Europe, Asia and Australia
- joined Pharmaxis in 2003 and was appointed Chief Executive Officer in March 2013 at which time he was Chief Operating Officer
- previously held country and regional management roles at Novartis – Hungary, Asia Pacific and Australia

David McGarvey – CFO

- more than 30 years' experience building Australian based companies from inception to globally successful enterprises
- joined Pharmaxis as Chief Financial Officer and Company Secretary in December 2002
- previously Chief Financial Officer of the Filtration and Separations Division of US Filter (1998-2002), and Memtec Limited (1985-1998)
- commenced career at PriceWaterhouseCoopers



Brett Charlton - Medical

- more than 25 years experience in clinical trial design and management
- author of more than 80 scientific papers
- founding Medical Director of the National Health Sciences Centre
- previously held various positions with the Australian National University, Stanford University, the Baxter Centre for Medical Research, Royal Melbourne Hospital, and the Walter and Eliza Hall Institute

Wolfgang Jarolimek – Drug Discovery

- more than 18 years' experience in pharmaceutical drug discovery and published more than 30 peer reviewed articles.
- previously Director of Assay Development and Compound Profiling at the GlaxoSmithKline Centre of Excellence in Drug Discovery in Verona, Italy
- spent 8 years as post-doc at the Max-Plank Institute in Munich, Germany; Baylor College of Medicine, Houston, Texas; Rammelkamp Centre, Cleveland Ohio; and University of Heidelberg, Germany

Kristen Morgan – Alliance Management

- responsibility for alliance management and medical and regulatory affairs
- more than 19 years' experience in the pharmaceutical industry having previously held a senior role in medical affairs at Sanofi-Aventis, and a commercial sales role at GlaxoSmithKline.

Non Executive Directors

- **Malcolm McComas** – *Chair*
  - former investment banker at Grant Samuel
- **Kathleen Metters**
  - former head of worldwide basic research at Merck
  - former CEO of biopharmaceutical company Lycera Corp.
- **Will Delaat**
  - former CEO of Merck Australia
  - former chair of Medicines Australia
- **Simon Buckingham**
  - former President Global Corporate and Business Development at Actelion

Pharmaxis portfolio

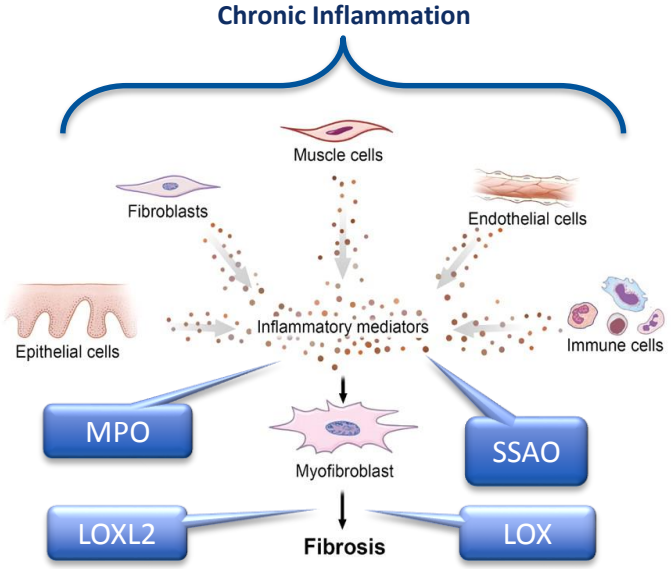
	Indication	Discovery	Lead Optimisation	Pre Clinical	Phase I	Phase II	Phase III	Marketed
Commercial								
Bronchitol® US	Cystic fibrosis	Phase 3 trial met primary endpoint in 2017. Chiesi planning to file with FDA Q4 2018. Subject to FDA approval, US partner Chiesi will launch commercially in the US.						Chiesi
Bronchitol RoW	Cystic fibrosis	Bronchitol is currently sold in the UK, Germany and Italy by Chiesi; some other European countries and Russia by specialist distributors and by PXS in Australia and smaller countries						Direct & Dist
Aridol®	Asthma diagnosis	Aridol is approved and sold in Australia, South Korea and a number of European countries. Scheduled to re-enter US market in CY 2018 with specialist distributor and Canada in 2019.						Direct & Dist
In the clinic								
SSAO (PXS-4728A)	NASH	Sold to Boehringer Ingelheim in May 2015. Phase 2a trial commenced August 2017. PXS received payments of A$68m to date.						Boehringer Ingelheim
SSAO (PXS-4728A)	Diabetic retinopathy	Boehringer commenced dosing a Phase 2a trial in January 2018. PXS received A$15m to date.						Boehringer Ingelheim
LOXL-2	NASH, fibrosis - liver, lung, kidney, heart	Phase 1 trials in 2 compounds. Both compounds are proceeding to Phase 1 multiple ascending dose stage. Reporting Q3/Q4 2018. Commercial partnering process Q4 2018.						
Preclinical								
SSAO/MPO	Inflammation	Dual inhibitor anti-inflammatory. Commenced pre-clinical tox Q4 2017.						
LOX - oral	Cancer	Anti-fibrotic. Commenced pre-clinical tox studies Q4 2017.						
LOX – topical	Scarring	Anti-fibrotic. Effective in scarring models.						

Progress in last 12 months

A pipeline of drugs for inflammation and fibrosis

Pharmaxis has developed a commercial pipeline of small molecule drugs against high value targets

Targeting multiple different pathways



Key areas of current focus:
- NASH/liver fibrosis – SSAO and LOXL2
- Diabetic retinopathy (DR) - SSAO
- Pulmonary fibrosis (PF) – LOXL2

Other active programs:
- Pancreatic cancer & myelofibrosis – LOX (oral)
- Scarring – LOX (topical)
- Inflammatory bowel disease – SSAO/MPO
- Respiratory – SSAO/MPO

Pharmaxis Drug Discovery

Pharmaxis has developed a commercial pipeline of small molecule drugs for inflammation and fibrosis

- Amine oxidase enzymes are well validated as targets in diseases with a high unmet medical need
- Pharmaxis are global leaders in amine oxidase enzyme inhibition
- Pharmaxis developed IP
- Since 2015 the platform has delivered:
  - 1 compound in 2 x phase 2 trials (SSAO)
  - 2 compounds completing phase 1 trials (LOXL2)
  - 2 compounds in preclinical development approaching the clinic
    - SSAO/MPO
    - LOX (oral)

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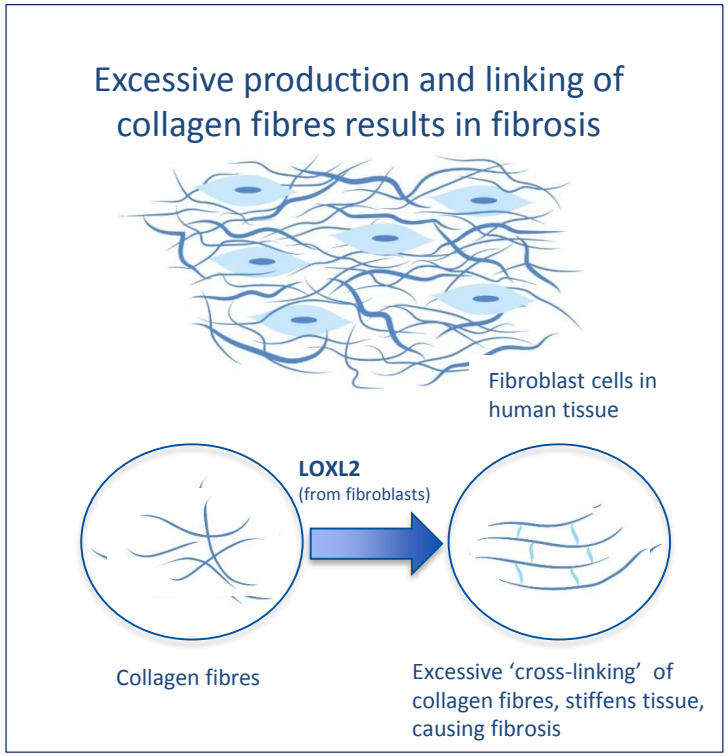
Key catalysts targeted for 2018/2019

Pharmaxis value driving events

1. **LOXL2 anti fibrotic program**
   - Phase 1 trials final stage to complete Q3 2018
   - Phase 2 enabling toxicity studies to report H2 2018
   - Partnering process commenced - to run through Q4 2018.
2. Boehringer Ingelheim acquired SSAO inhibitor (BI 1467335) to report **clinical proof of concept** in two major diseases as Phase 2 trials report in H1 2019
3. **Two additional programs to enter the clinic**
   - LOX (oral) for pancreatic cancer and myelofibrosis to start phase 1/2a clinical study H1 2019
   - SSAO/MPO combo to complete pre-clinical development in H1 2019
4. Others
   - Bronchitol **FDA re-submission** by Chiesi in Q4 2018
   - Other internal programs developing **additional compounds** to take into preclinical development
   - Evaluating opportunities for in-license or acquisition of new programs in fibrosis and inflammation that **leverage PXS** research and commercialisation capabilities

LOXL2 inhibition program

for NASH, IPF & other high value fibrotic diseases



- Potential indications / market size:
  - NASH / Liver Fibrosis; $35b[1]
  - Pulmonary fibrosis (IPF); $3.5b[2]
  - Kidney fibrosis
  - Cardiac fibrosis

  Significant market opportunity

- LOXL2 and fibrosis:
  - LOX family of enzymes are the final step in the fibrotic disease process
  - Pharma supported research clearly associates increased levels of LOXL2 with disease progression in IPF, NASH and cardiac fibrosis

- Competitive profile:
  - Novel target and mechanism of action
  - Once daily oral drug
  - Best in class drug with high level inhibition of LOXL2 enzyme for 24 hours from one dose.
  - Only known drug in clinical development to inhibit LOXL3
  - Place of LOXL2 at the end of the fibrotic cascade provides opportunity to use in combination with other Pharma pipeline drugs

1. Deutsche Bank market forecast for 2025
2. iHealthcareanalyst. Inc market forecast for 2021

LOXL2 inhibitor program

approaches “deal ready” status

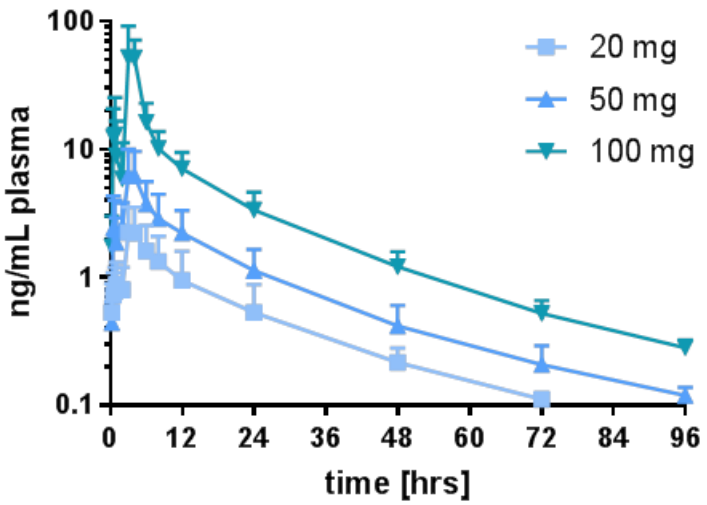
Feature	What Pharma values	PXS program status
Disease target	Independent validation	Multiple peer reviewed publications
Pre clinical proof of concept	2 or more different supportive animal models	Multiple supportive models across 5 different diseases. Further studies in progress
Dosing regimen	Ease of use	Oral once a day tablet or capsule
Patent	Composition of matter As long as possible	Composition of matter 2016 filing date; 100% PXS owned
Cost of Goods	Low	Small molecule with easy synthesis
# Compounds	1 plus backups	2 compounds in clinical development plus back ups
Toxicity	Wide therapeutic window As long as possible	28 day tox studies complete 13 week studies (2 species) in progress – report H2
Clinical phase	Phase 1 with target engagement Phase 2 ready	First stage for both compounds complete, proceeding to second stage – complete Q3/Q4 2018. Manufacture of drug quantities (commence H2 2018) for rapid partner start of phase 2
Target engagement	Drug inhibits target	High levels of inhibition for 24 hours from a single dose

LOXL2: Phase 1 Study in 2 compounds

Positive safety and PK/PD findings in SAD[1] Phase 1 trials

- Both compounds were well tolerated and cleared for progressing to MAD[2] stage
- Pharmacokinetic parameters of both compounds increased with ascending dose
- Target engagement assay indicated that both compounds inhibited LOXL2 in a dose-related fashion.
- 24 hour inhibition is achieved with a single dose.

Pharmacokinetics of one compound in SAD stage – 3 of 6 doses tested



Preliminary MAD[2] data from one compound

- Dose dependent increase in Cmax and AUC
- Some accumulation occurred between Day 1 and Day 7 as expected from T1/2
- No further PK changes between Day 7 and Day 14
- PK properties are as predicted from SAD data
- Target engagement data are very reproducible (Day1 data are identical to SAD)
- Accumulation of compound over days increases plasma concentration and target engagement
- 400mg daily dose causes >80% inhibition of the LOXL2 enzyme over 24 hrs

1. Single Ascending Dose (SAD): single oral doses of different strengths were trialled in healthy volunteers
2. Multiple Ascending Dose (MAD): different fixed doses are given in healthy volunteers for 14 days

LOXL2 inhibitor program – partnering process

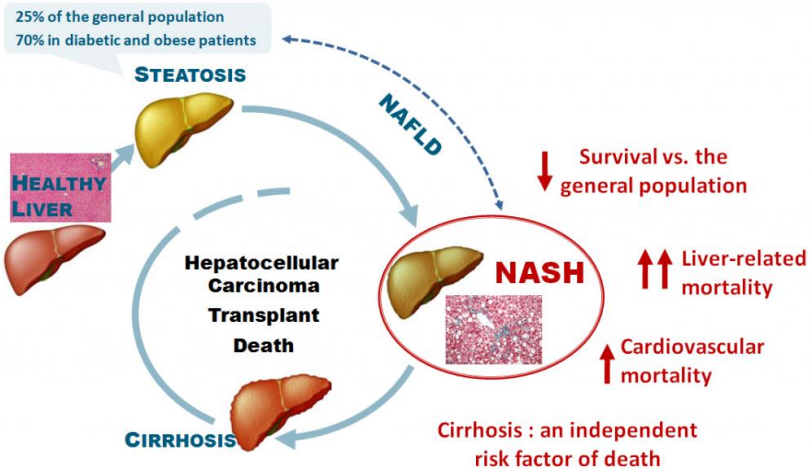
Positive engagement with pharma companies

- Pharma company interest driven by search for:
  - Inhibitor to LOXL2 and LOXL3 enzymes,
  - Effective anti-fibrotic drug, and/or
  - Drugs to complement existing disease portfolio – lung, liver, kidney, heart, etc.
- Pharmaxis engagement with multiple potential partners on planning and progress of the LOXL2 program for over 2 years
- Pharmaxis data packaging will complete over Q3 & Q4, including:
  - Second stage of phase 1 trials for both compounds
  - 13 week tox studies (2 species) for both compounds
  - Additional disease models
- Data room has been available (under CDA) since Q4 2017
- Commercial partnering discussions expected Q4 2018

SSAO (Boehringer Ingelheim): Pharmaxis poised to be a major player in diseases caused by complications of diabetes

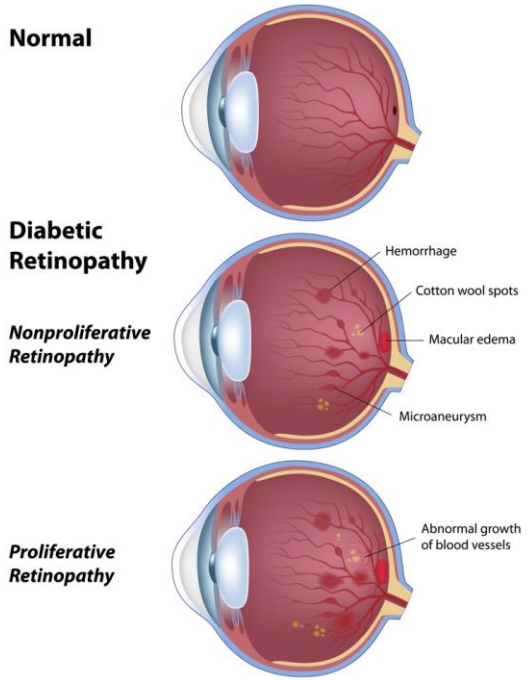
Two diseases with high unmet need and large patient populations in Phase 2 studies

NASH



- Expected to become leading cause of liver transplant by 2020
- No approved treatments

Diabetic Retinopathy



- Affects ~95 million people worldwide
- No approved treatments for early stage disease

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SSAO: Phase 2 trials to show clinical proof of concept in H1 2019

Boehringer Ingelheim responsible for clinical development and commercialisation

NASH

- Phase 2a trial expected to report H1 2019 – proof of efficacy in patients with moderate – severe disease
- Deutsche Bank estimate market size of US$35b by 2025
- First in class anti inflammatory SSAO inhibitor for NASH with peak sales potential of ~US$2b [Analyst's estimate]

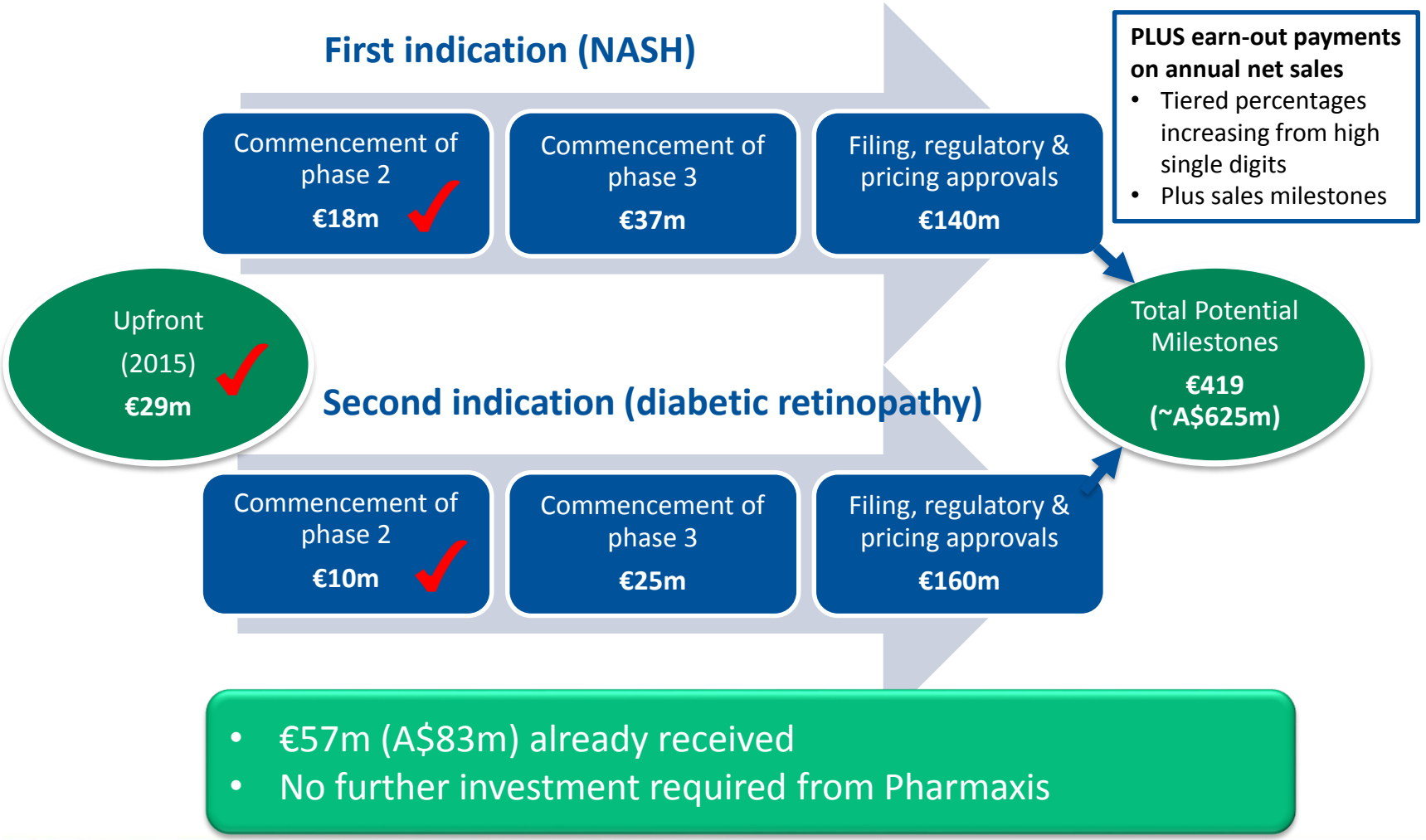
Diabetic Retinopathy

- Phase 2a SSAO diabetic retinopathy expected to report H1 2019 – proof of efficacy in patients with early stage disease
- Affects one third of diabetic patients world wide
- No approved treatments for early stage disease
- First in class anti inflammatory SSAO inhibitor for DR with peak sales potential of ~US$800m [Analyst's estimate]

SSAO: Boehringer Ingelheim deal

Boehringer Ingelheim

Deal structure illustrates value generating potential of Pharmaxis business model



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More programs approaching the clinic

Program	LOX (oral)	Combo SSAO/MPO
Indication	Severe fibrotic indications: ▪ pancreatic cancer ▪ myelofibrosis	▪ Inflammatory bowel disease ▪ Respiratory disease
Commercialisation	Partner after phase 2	Partner after phase 2
Status	▪ Commenced pre-clinical tox Q4 2017 ▪ Effective in animal models of pancreatic cancer and myelofibrosis	▪ Commenced pre-clinical development Q4 2017 ▪ Ongoing evaluation in various models of inflammation
Next steps 2018/2019	▪ Additional animal models of pancreatic cancer and myelofibrosis ▪ Complete preclinical 28 day tox (H2 2018) and 3 month tox (to permit fast track to phase 2a) ▪ Commence phase 1a (H1 2019) ▪ Commence phase 1b/2a	▪ Readouts from ongoing studies in various disease models of inflammation ▪ Determine target indication in conjunction with SAB ▪ Complete preclinical 28 day tox ▪ Commence phase 1

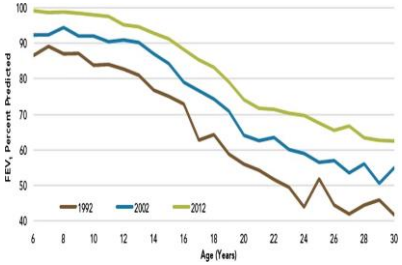
Pharmaxis purpose built facility

Pharmaxis has a purpose built manufacturing and drug development facility in Sydney

- Manufacturing and research facilities
- Productive R&D drug discovery engine
- Team of 15 scientists specialising in amine oxidase chemistry drug discovery and pre clinical development
- Capability to run global clinical trials
- Manufacturing and exporting approved products:
  - Bronchitol®
  - Aridol®
- Capacity for future growth

Bronchitol for cystic fibrosis

Overview



Median FEV_1 % Predicted versus Age

Chiesi
People and ideas for innovation in healthcare

Cystic fibrosis

- Patients
  - US: 30,000;
  - Europe: 37,000;
  - Russia: ~10,000[1]
  - Australia: 3,500
  - Total world: ~100,000
- Disease characterised by poorly hydrated, tenacious, thick mucus
- Inexorable decline in lung function
- Frequent infections

Bronchitol

- Active ingredient mannitol delivered as an inhalable dry powder
- Restores airway surface liquid
- Mucus clearance enhanced
- Improves lung function
- Reduces incidence of lung infections

Business model - RoW

- Distributors responsible for promotion & support
  - Chiesi in UK, Germany, Italy & Ireland
  - Other distributors in Russia, Eastern Europe, Middle East
  - PXS revenue share ~50%
  - Russian reimbursement decision H2 2018
- PXS direct in Australia and smaller markets

Business model - US

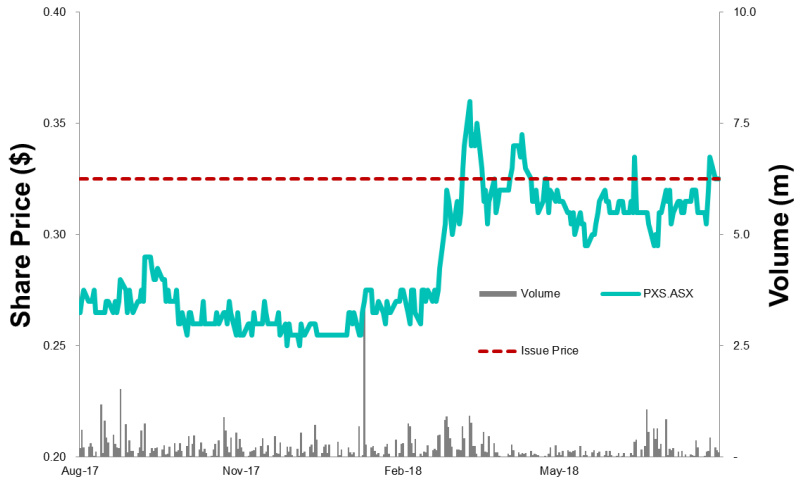
- Phase 3 trial (CF303) reported June 2017
- Chiesi responsible for regulatory filing & commercialisation – preparing for launch
- File updated NDA - Q4 2018
- ~A$13m milestone payment on launch
- PXS supplies US market from Sydney factory
- PXS receives high mid teens % of in-market sales plus cost of goods

1. Estimates vary from 7,000 to 30,000

Shareholders & trading

Financial Information	
ASX Code	PXS
Market Cap[1]	$101m
Shares on Issue	320m
Employee Options[1]	17m
Liquidity (turnover last 12 months)[1]	71m shares
Share price[1]	$0.315
Analyst valuation[2]	$0.52
Cash Balance (30 June 18 Pro Forma Post Capital Raising)	A$54m

Institutional Ownership[3]	%
BVF Partners (US)	22%
Australian Ethical	9%
Allan Gray	6%
Montoya Investments (UK)	6%
Other Institutions	8%
Total Institutional Ownership	**51%**



1. As at 2 August 2018
2. Bell Potter Securities Research 30 April 2018
3. Prior to completion of the Placement

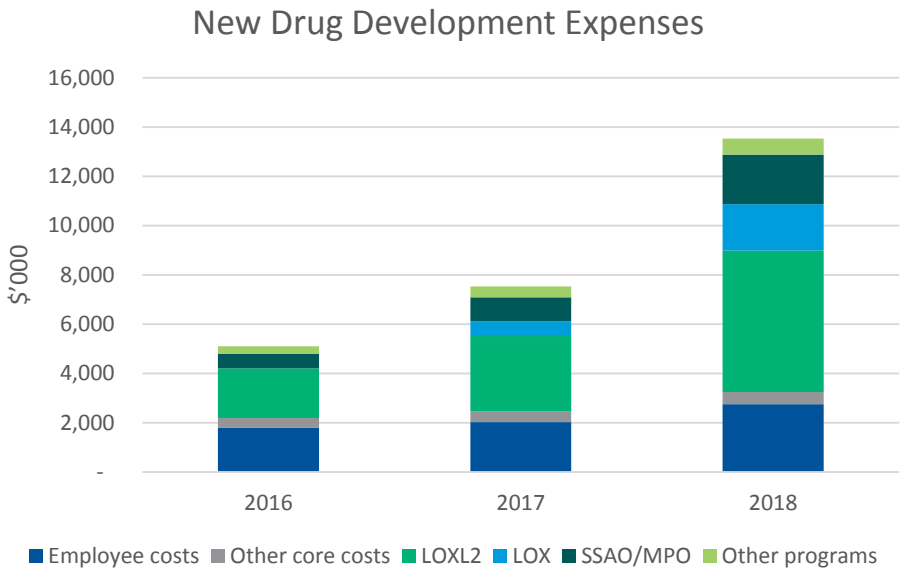
Financials highlights

A$'000	Three months ended		Twelve months ended	
(unaudited)	**30-June-18**	**30-June-17**	**30-June-18**	**30-June-17**
Income statements				
Sales of Bronchitol & Aridol	1,900	866	6,094	4,823
Milestones from sale of drug	-	-	42,130	-
Total revenue	2,213	6,945	50,831	18,001
Total expenses	(9,857)	(11,057)	(44,413)	(36,347)
Net profit (loss) after tax	**(7,645)**	**(4,112)**	**6,428**	**(18,346)**
Segment results – adjusted EBITDA				
Bronchitol & Aridol [1]	(1,198)	(2,421)	(3,786)	(7,100)
New drug development[2]	(3,683)	199	28,771	(4,114)
Corporate[3]	(947)	(1,005)	(13,466)	(4,017)
Total	**(5,827)**	**(3,227)**	**11,519**	**(15,231)**
Statement of cash flows				
Cash inflow/ (outflow) from:				
Operations	(2,712)	(4,228)	12,206	(15,262)
Investing activities	(280)	(328)	(884)	(723)
Financing activities	(443)	(434)	(1,753)	(1,721)
Total cash generated/(used)	**(3,435)**	**(4,990)**	**9,569**	**(17,606)**
Cash at bank	**31,073**	**21,504**	**31,073**	**21,504**

1. Refer slide 27 for additional detail
2. Refer slide 26 for additional expenditure detail
3. 2018 includes $9.6 million in relation to changes in a collaboration agreement
4. Refer to June 2018 Quarterly Shareholder Update for additional financial information

New Drug Development

Drug development and clinical trial expenditure by pipeline project

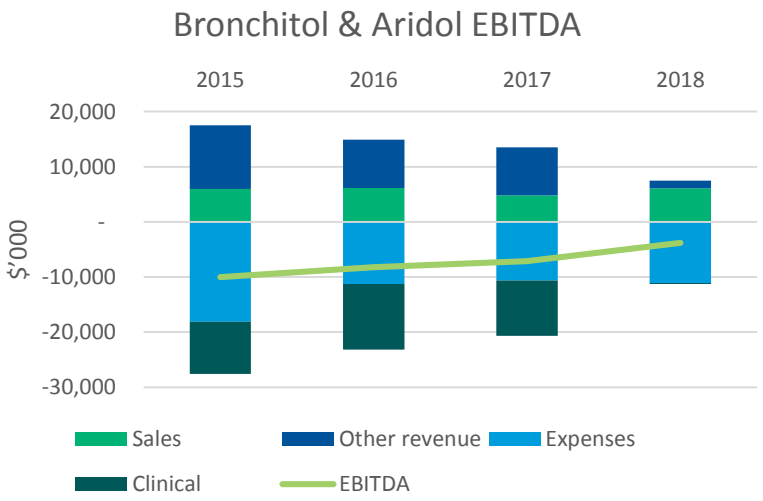


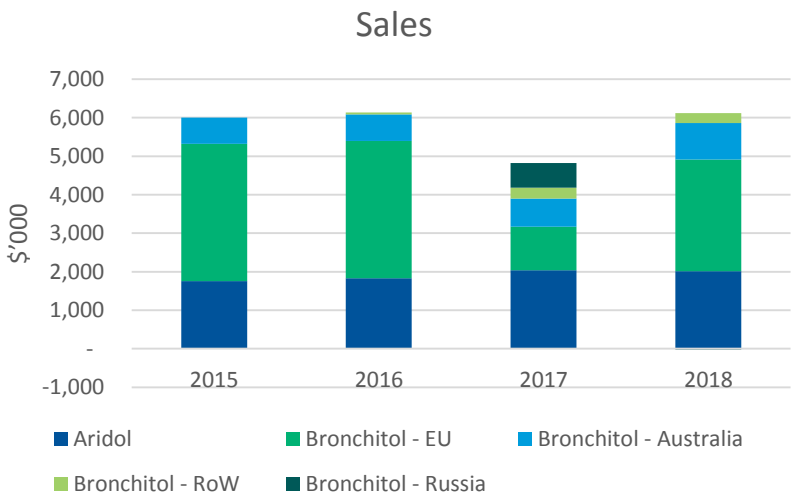
Current status/planned expenditure

- LOXL2:
  - 2 compounds in phase 1 – will complete H2 2018
  - 13 week tox for both compounds
  - GMP material for rapid phase 2 start by partner
  - Other preclinical studies to report Q3/Q4 2018
- LOX (oral) in preclinical
  - Disease models – cancer
  - GLP tox – 1 month & 3 month
  - GMP material – for phase 1a/2a clinical trials
  - Plan to start phase 1/2a CY 2019
- SSAO/MPO in preclinical
  - Disease models - ulcerative colitis
  - GLP tox – 1 month
  - GMP material for phase 2 clinical trials

Bronchitol & Aridol

Segment profitability





<u>Path to profitability:</u> increase revenue to leverage cost base

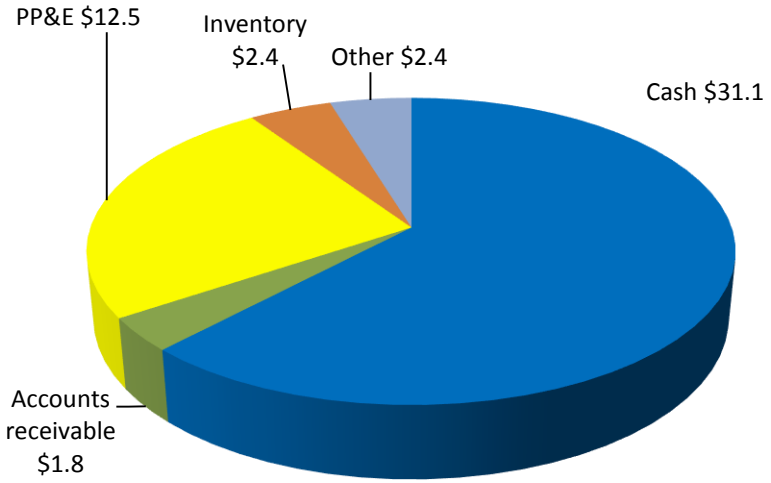
- Core cost base relatively fixed vs sales volume
- Reimbursement of Bronchitol in Russia key to rate of overall sales growth - decision Q3 2018
- US approval – Subject to FDA approval (~Q3 2019), launch Q4 2019 (US$10m milestone)
- Aridol planned to re-launch in US Q4 2018 with specialist distributor. FDA inspection of factory Q3 2018
- Other Bronchitol sales growth opportunities
- Continued growth in major Bronchitol launched markets – UK, Germany & Australia
- Growth in other Bronchitol markets: Italy, Spain, CZ, Ireland
- Aridol in Canada – target launch Q3 2019

<u>Revenue</u>

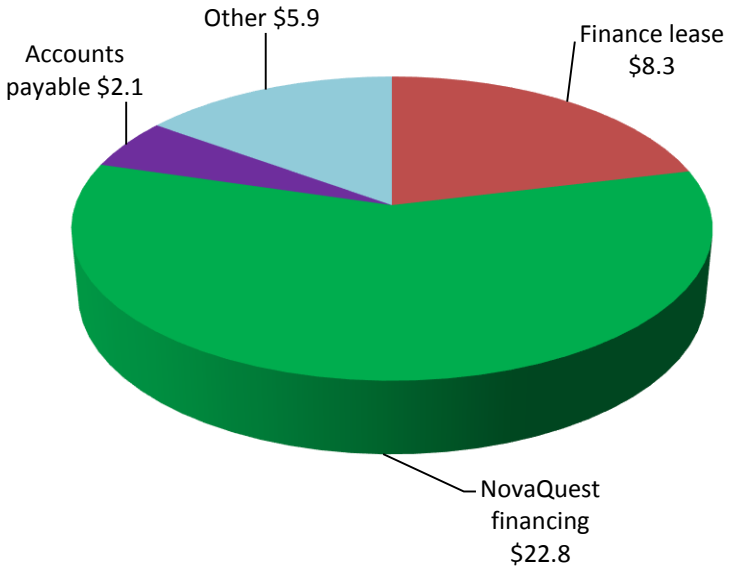
- 2015: Direct to pharmacy until June 15 (ie all sales revenue to PXS)
- 2016: EU sales via distributors at lower margin (`50%) to PXS. Chiesi builds inventory levels
- 2017: First sale to Russia ($640k)
- 2018: Growth in EU (Chiesi UK & Germany) & Australia (expanded PBS coverage)
- Other revenue in all years is predominantly reimbursement of clinical trial costs by US partner

Balance sheet – 30 June 2018

Assets ($50m)



Liabilities ($39m)



- Finance lease over 20 Rodborough Rd (to 2024)
- NovaQuest financing – not repayable other than as % of Bronchitol revenue

Summary

Pharmaxis is a global leader in drug development for fibrosis & inflammation

- Pharmaxis have built a **successful platform of small molecule drugs targeting high value fibrotic and inflammatory indications**
- **Development pipeline** across various stages - one drug in two phase 2 trials, one drug program (two compounds) in phase 1 trials, two compounds in pre-clinical development approaching the clinic, additional drug candidates in discovery.
- Proven track record of **early stage partnering** and taking products **through to commercialisation**
- **Potential to receive total up front and milestone payments of A$625m** plus further sales based payments from first deal (SSAO) – A$83m already received
- Next drug completing phase 1 trials and long term toxicity studies: **partnering deal planned Q4 2018**
- **Strong balance sheet - $31m** at June 2018
- **Numerous catalysts over the next 18 months**

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