Investor Presentation

pharmaxis

developing breakthrough treatments for fibrosis and inflammation

Investor Presentation | July 2023
Gary Phillips CEO

Forward looking statement

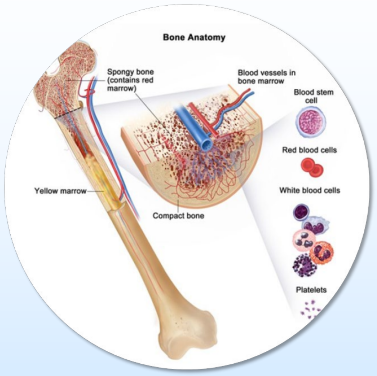
This document contains forward-looking statements, including statements concerning Pharmaxis' future financial position, plans, and the potential of its products and product candidates, which are based on information and assumptions available to Pharmaxis as of the date of this document. Actual results, 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 developing or partnering any of the 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.

Executive Summary

- Pharmaxis is a clinical stage drug development company targeting inflammation, fibrosis and selected cancer indications with first in class or best in class small molecule drugs in markets of high value
- Global leader in fibrosis driven by lysyl oxidase enzymes having invested in a multi year research program leveraged with extensive external scientific collaborations
- Breakthrough data and supportive feedback from FDA provides clear pathway to commercial value in $1bn myelofibrosis market
- Cash position at 31 March 2023 of A$15m, plus 2023 R&D tax credit similar to 2022 ($5m).

FIRST IN CLASS ANTI-FIBROTIC DRUGS

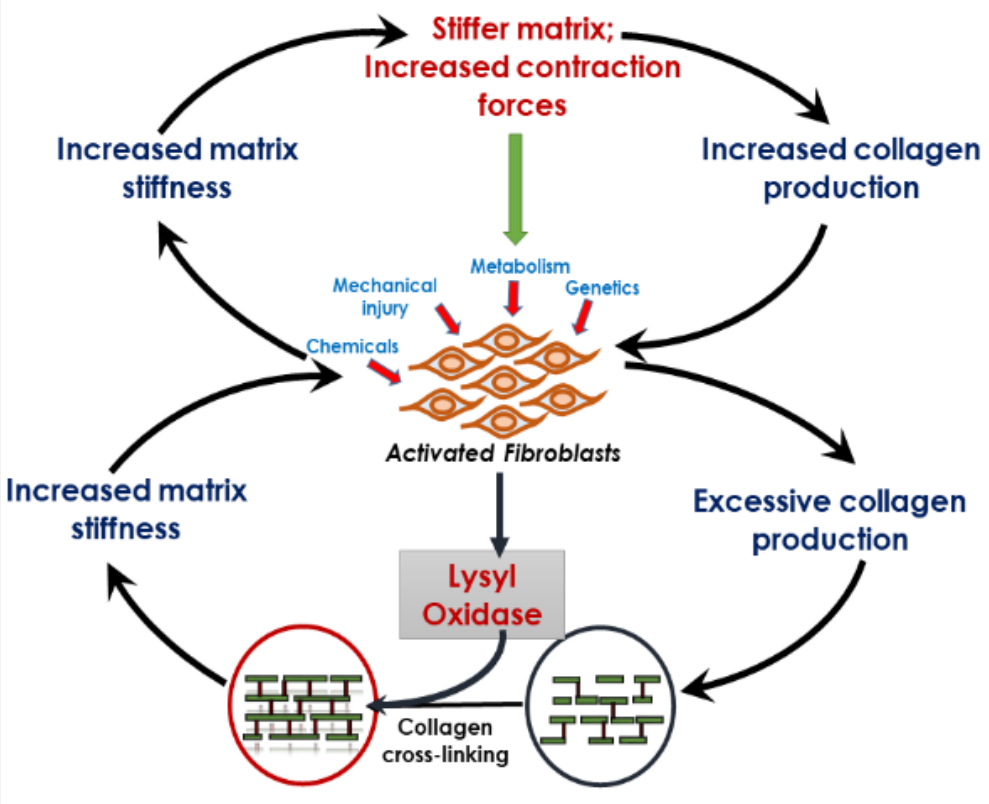


Clinical proof of concept that LOX inhibition reduces fibrosis achieved in two diseases in 2023

Pharmaxis is the global leader in lysyl oxidase chemistry and biology

Multi year research program leveraged with extensive scientific collaborations worldwide has delivered 2 drugs in the clinic

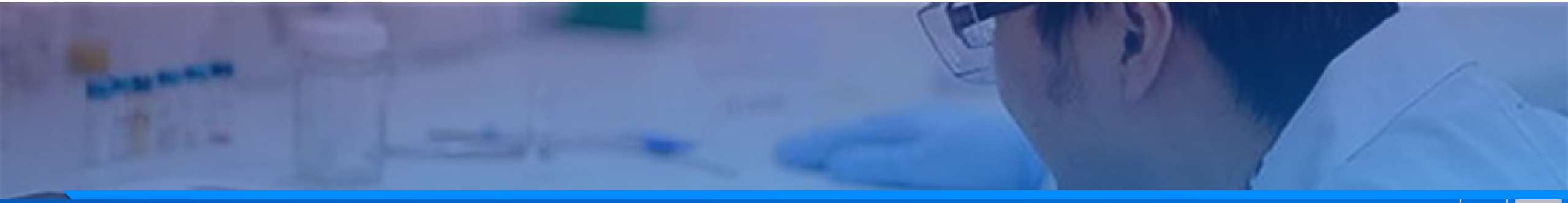
Lysyl oxidases are the final stage in fibrosis



Tissue stiffening due to increases in collagen and number of cross-links which is a hallmark of fibrosis, is preventable through lysyl oxidase inhibition; at the heart of a true anti-fibrotic therapy

- **PXS-5505**
  - Oral dosage form – four capsules twice a day
  - Patent filed - priority date 2018
  - Strong pre clinical evidence in models of fibrosis and cancer
  - INDs approved for myelofibrosis and hepatocellular carcinoma
  - Potential in multiple cancer indications
  - Phase 1 data demonstrates a safe, well tolerated drug that gives >90% inhibition of LOX enzymes
- **PXS-6302**
  - Topical dosage form
  - Patent filed - priority date 2019
  - Strong pre clinical evidence in models of skin fibrosis and scarring
  - Potential in prevention of scar formation and modification of existing scars
  - Phase 1a (healthy volunteer) data demonstrates a safe, well tolerated drug that gives full inhibition of LOX enzymes in the skin with minimal systemic exposure

Program Update

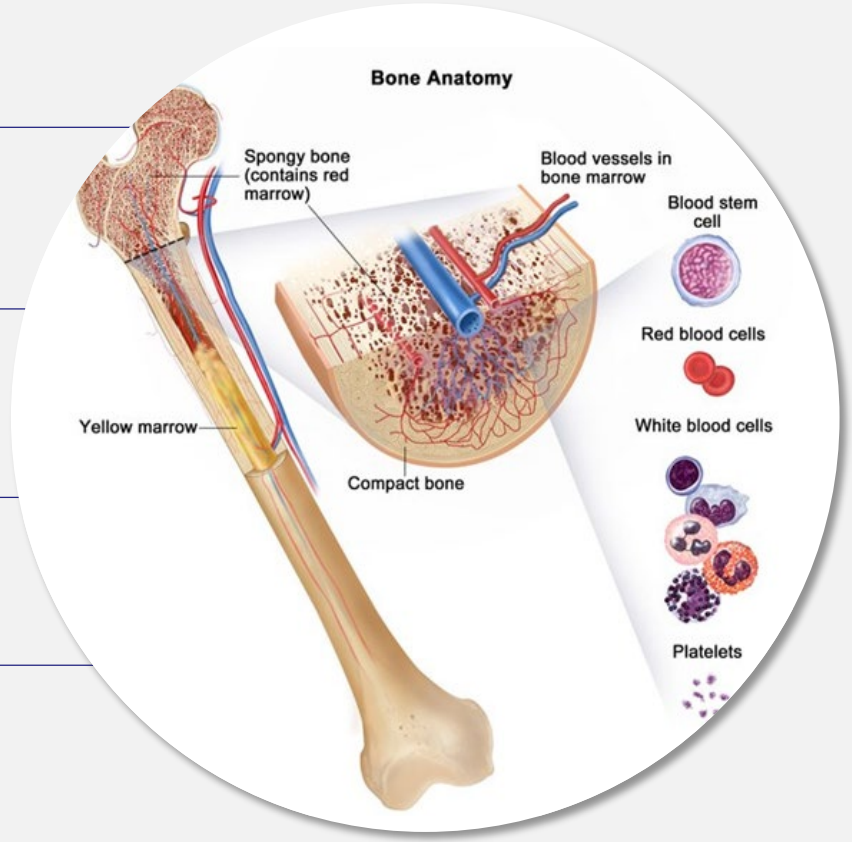


Myelofibrosis

A rare type of bone marrow cancer that disrupts the body's normal production of blood cells

KEY FACTS

- Affects ~15 in 1m people worldwide
- 5 Years Median survival
- Age of onset typically from age 50
- 11% transformation to leukemia



Primary Myelofibrosis is caused by a build up of scar tissue (fibrosis) in bone marrow reducing the production of blood cells:

- Reduced red blood cells can cause extreme tiredness (fatigue) or shortness of breath
- Reduced white blood cells can lead to an increased number of infections
- Reduced platelets can promote bleeding and/or bruising
- Spleen increases blood cell production and becomes enlarged
- Other common symptoms include fever, night sweats, and bone pain

Current Standard of Care; JAK inhibition

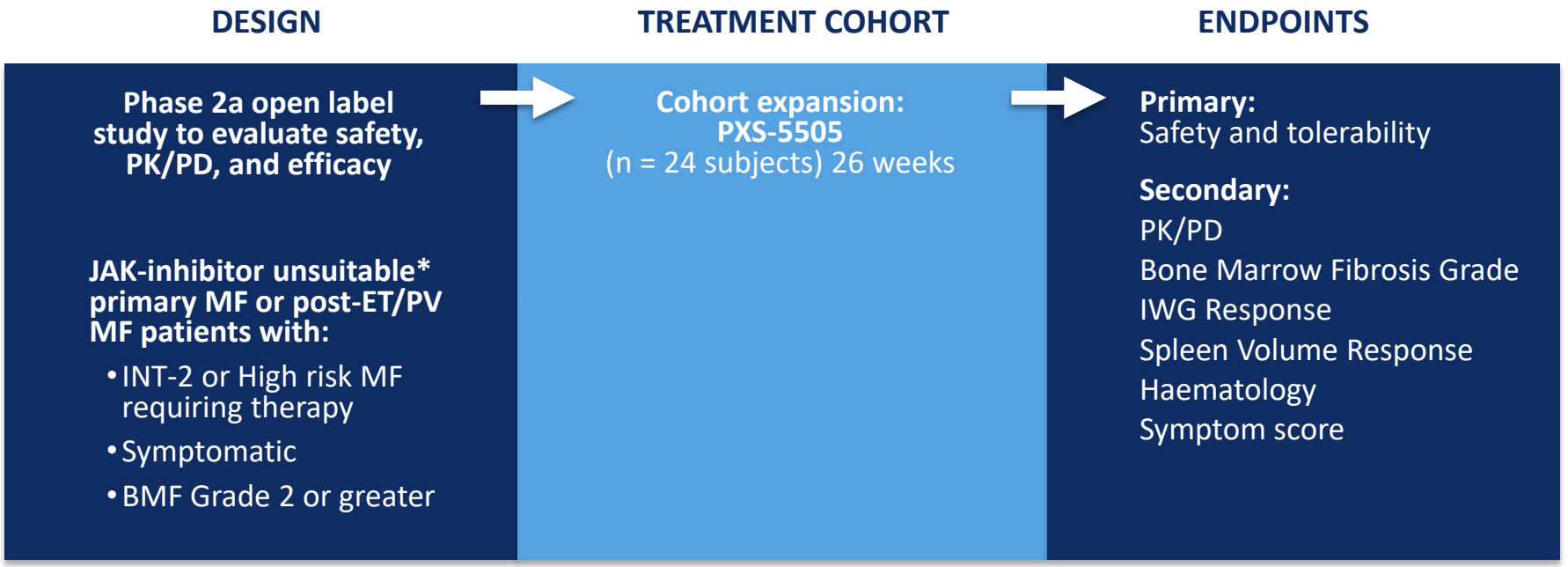
- Symptomatic relief plus some limited survival improvement. 75% discontinuation at 5 years
- Median overall survival is 14 – 16 months after discontinuation

Commercial Opportunity

- Current standard of care ; revenue ~US$1b per annum

Myelofibrosis - PXS-5505 Phase 1/2a Trial

6 month monotherapy study with meaningful safety and efficacy endpoints



FDA granted orphan drug designation July 2020 and IND approved August 2020

20 sites across 4 countries (Australia, South Korea, Taiwan, USA)

Study recruitment commenced Q4 2021

*Unsuitable = ineligible for JAKi treatment, intolerant of JAKi treatment, relapsed during JAKi treatment, or refractory to JAKi treatment. JAKi – Janus Kinase inhibitor, MF myelofibrosis, ET Essential Thrombocythaemia, PV polycythaemia vera, INT intermediate, BMF bone marrow fibrosis, PK pharmacokinetics, PD pharmacodynamics, IWG International Working Group Myeloproliferative Neoplasms

Myelofibrosis - PXS-5505 Phase 2a Trial (*FINAL INTERIM DATA)*

Very well tolerated with encouraging signs of clinical efficacy in JAK inhibitor unsuitable patients

- **Study status**
  - 21 out of a targeted 24 patients have been enrolled
  - 10 patients having completed 24 weeks of treatment
- **Safety**
  - PXS-5505 has been well tolerated with no serious treatment related adverse events reported
  - Majority of AEs were mild and not related to treatment
  - 10 patients have dropped out of the study; none were treatment related
- **Efficacy**
  - 5/9 evaluable patients* had improved bone marrow fibrosis scores of ≥1 grade with 4 out of 5 fibrosis responders demonstrating stable hematological parameters and 3 out of 5 patients reporting symptomatic improvement
  - 4 had an improvement in symptom score of >20%
  - 7 had stable/improved hemoglobin (Hb) counts
  - 8 had stable/improved platelet counts; 3 of these 8 patients entered the study with Grade 4 (potentially life-threatening) thrombocytopenia
  - No spleen volume response (SVR35) was identified

*One of the 10 patients who completed the 6 months treatment could not be evaluated for bone marrow fibrosis grade due to an insufficient sample at baseline.

PXS-5505 Phase 2 Trial (MF-101); Expert review of interim data

Key Opinion Leader Review

- "PXS-5505 continues to show not only an excellent safety profile but also promising clinical activity. The effect on bone marrow fibrosis is particularly exciting for a disease like myelofibrosis, where despite numerous years of research, we do not have any effective anti-fibrotic drugs."
- "It is encouraging to see that majority of 10 patients who completed 24 weeks of therapy also had improvements of symptoms and more importantly, stable or improved blood counts; including in those patients with severe thrombocytopenia."
- "These results support plans to continue clinical investigation of the agent, including combinations with JAK inhibitors where the lack of overlapping hematological toxicity would make PXS-5505 an ideal add-on candidate."

Dr. Lucia Masarova

Assistant Professor, Department of Leukemia at MD Anderson Cancer Center, Houston

PXS-5505 myelofibrosis clinical development plan: Regulatory update

FDA feedback:

- FDA Type C Meeting held in Q2 2023
- FDA reviewed all safety and efficacy data available at that time.
- Subject to protocol review FDA supported progression into a study in combination with a JAK inhibitor
- FDA provided guidance on the number of patients, treatment dosage, study duration and endpoints
- Trial protocol proposed to FDA
  - Uses existing trial sites; fast start up and minimal initiation costs
  - No dose escalation step; fastest route to meaningful data
- FDA feedback expected July 2023

Hypertrophic and keloid scarring

Cutaneous scarring following skin trauma or a wound is a major cause of morbidity and disfigurement

KEY FACTS

100m patients develop scars in the developed world alone each year as a result of elective operations and operations after trauma

Hypertrophic scars and keloids are fibroproliferative disorders that may arise after any deep cutaneous injury caused by trauma, burns, surgery, etc.

Hypertrophic scars and keloids are cosmetically and functionally problematic significantly affecting patients' quality of life

"In (preclinical) models of scarring we found that topical application of PXS-6302 reduces collagen deposition and cross-linking and improves scar appearance without reducing tissue strength. This is a unique way of modulating a critical stage in scar formation and maintenance and holds out great promise for the treatment of scars." *- Dr Mark Fear, UWA*

- Mechanisms underlying scar formation are not well established; prophylactic and treatment strategies remain unsatisfactory
- Current standard of care includes:
  - Corticosteroids
  - Surgical revision
  - Cryotherapy
  - Laser therapy
  - 5-fluorouracil

- Pre clinical evidence
  - Treatment with PXS-6302 monotherapy demonstrates cosmetic and functional improvements to scarring in pre clinical models[1]
- Clinical evidence
  - 3 month phase 1c in established scars demonstrates good tolerability, full inhibition of LOX in skin and marked change in scar composition
- Commercial Opportunity
  - Total scar treatment market in 2019 exceeded US$19b. Keloid and hypertrophic scar segment ~US$3.5b

Note 1: Chaudhari et al, Topical application of an irreversible small molecule inhibitor of lysyl oxidases ameliorates skin scarring and fibrosis, Nature communications 2022 https://doi.org/10.1038/s41467-022-33148-5

Established Scarring – PXS-6302 Phase 1c Trial (Solaria 2)

3 month monotherapy study to assess dosage, tolerability and efficacy endpoints

DESIGN

Phase 1c

- **3 month**
- **Objectives:**
  - **Confirm PK/PD*, safety and efficacy of dose selected in dose escalation**
- **Double blind placebo controlled**

PATIENT DEMOGRAPHICS

42 Adult patients (18-60) with an established scar > 1year:

- **Average age of scar; 12.8 years**
- **Low to moderate severity**
- **Included all surgery types.**
- **Scar > 10cm^2.**
- **Excluded patients with acute skin conditions or history of keloids**

ENDPOINTS

Primary:
Safety and tolerability

Secondary:

- Characterize PK/PD* parameters

Exploratory:

- Physical and visual skin and scar assessments

Investigator initiated study (sponsor UWA) - long term collaboration with UWA to research and develop PXS-6302 supported by Australian NHMRC grants

Single site study in Perth Australia

Study Completed March 2023

Study reported May 2023

* PK pharmacokinetics, PD pharmacodynamics,

PXS-6302 Phase 1c Trial (Solaria 2); Top line results

- **PXS-6302 was very well tolerated and demonstrated a good safety profile.**
  - No serious adverse events were reported
  - Two patients withdrew from the study; reversible rash
- **Mean inhibition of LOX activity 66% compared to baseline and placebo** ($p<0.001$)
  - LOX measured 2 days post final dose
  - LOX is responsible for the cross linking of collagen fibres implicated in adverse scarring.
- **Meaningful changes in the composition of the scars**
  - Patients in the active arm had a mean reduction in collagen[1] of 30% compared to placebo after three months treatment. ($p<0.01$)
- **Longer study required to show appearance and physical improvements**
  - No significant differences in the overall POSAS[2] score were seen between active and placebo groups after three months of treatment.

1. Collagen content quantified via hydroxyproline assay
2. POSAS: Patient and Observer Scar Assessment Scale

PXS-6302 Phase 1c Trial (Solaria 2); Expert review

- "Exploratory clinical study has significantly enhanced our understanding of the role of LOX enzymes in scarring and the scar process itself."
- "PXS-6302 leads directly to an unprecedented change to the scar composition that we have not seen with any other form of treatment. We estimate that up to 50% of the excess collagen in these patients' scars has been removed."
- "While the length of this Phase 1c safety study was not sufficient to change the appearance of an established scar the remodelling process will be ongoing and I'm confident we would see an improvement in scar appearance and physical characteristics if we observed them for longer."

Professor Fiona Wood
Burns Service of Western Australia
Director of the Burn Injury Research Unit
University of Western Australia

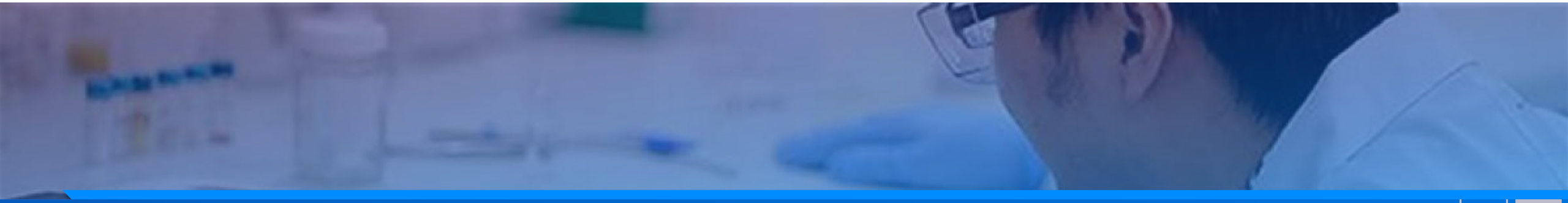
* PK pharmacokinetics, PD pharmacodynamics,

Phase 1c Established Scar Trial (Solaria 2); Next steps

- Positive data from Solaria 2 trial leads to extension of collaboration with Professor Wood's UWA team
- Wide vista of potential skin fibrosis indications opened up for clinical development. For example:
  - Younger scars
  - Scar prevention post surgery
  - Keloids
  - Dupuytren's
  - Surgical adhesions
- Further update on plans for skin scarring franchise 2H 2023

* PK pharmacokinetics, PD pharmacodynamics,

Upcoming News Flow



Five trials to deliver near term value

Pipeline creates multiple opportunities in high value markets

	Indication	Addressable market (US$)	Trial design	# patients	Status	Data
PXS-5505	Myelofibrosis (MF)	$1 billion	Phase 2 open label 6 month study in JAK intolerant / ineligible myelofibrosis patients	24	Recruiting	Final interim data released July 2023
			Phase 2 open label 6 month study in JAK intolerant / ineligible myelofibrosis patients	TBD	First Patient 2H 2023	TBD
PXS-6302	Modification of established scars	$3.5 billion	Phase 1c 3 month placebo controlled study in patients with established scars (>1 year old)	50	Reported	Top line results released May 2023
	Scar prevention	$3.5 billion	Phase 1c 3 month placebo controlled study in patients with scarring subsequent to a burns injury	50	First patient 2H 2023	2024
PXS-4728	Isolated REM sleep behaviours disorder (iRDB) and neuro inflammation	$3.5 billion	Phase 2 double blind, placebo controlled study in patients with iRBD	40	First patient Q3 2023	H1 2025

News flow

Recent and anticipated news flow

Strong and growing pipeline with advancement in studies expected to provide value inflection points

Q1 2023

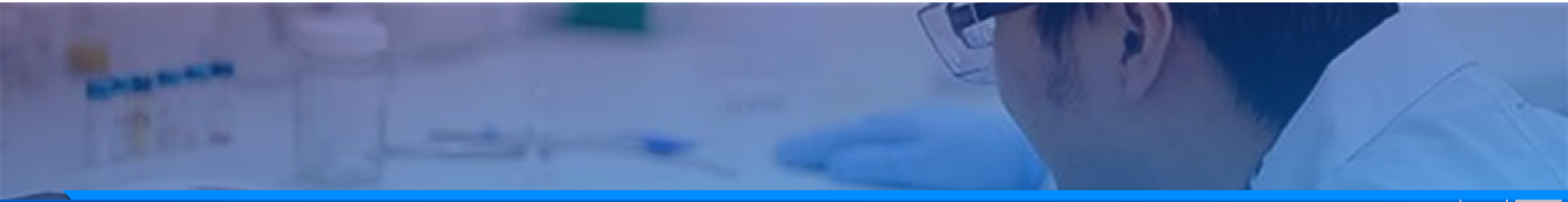
- Pharmaxis strengthens Board with two new appointments
- PXS-5505 publication by KOL in hematological cancer myelodysplastic syndrome

Q2 2023

- PXS-5505: Encouraging FDA feedback on plans to progress to JAK inhibitor combination study
- LOX topical drug PXS-6302 top line data from established scars study
- PXS-5505 myelofibrosis monotherapy study: significant data update

H2 2023

- PXS-5505 phase 2 myelofibrosis study add on to JAK inhibitor commences recruitment
- Pan-LOX scar treatment and prevention clinical development update and trial initiation
- PXS-4728 iRBD / neuro inflammation study commences recruitment
- PXS-5505 phase 2a myelofibrosis study completed and reports safety and efficacy data at ASH



Shareholders & cash

Financial Information	18 July 23
ASX Code	PXS
Share price	$0.054
Liquidity (turnover last 12 months)	91m shares
Market Cap	A$40m
Cash balance (31 March 2023)	A$15m
Enterprise value	A$25m
Clinical development program supported by: • R&D tax credits (PXS 2022 claim was $5m) • Strategy of partnering deals with pipeline assets	

Institutional Ownership	30 June 23
BVF Partners LP	14%
Karst Peak Capital Limited	12%
D&A Income Limited	11%
Platinum Investment Management Limited	8%
Regal Funds Management Pty Ltd	5%
Total Institutional Ownership	**50%**

Share Price

*Mannitol segment EBITDA only

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