## Quarterly Report to Shareholders No 1









# pharmaxis

Alan D Robertson Chief Executive Officer

October - December 2003

Pharmaxis is a specialist pharmaceutical company committed to the research, development and commercialisation of human therapeutic products that address chronic respiratory and autoimmune diseases and the development of an improved lung function test.

#### Company Overview

- Strength lies in our diversified portfolio of products at various stages of development which target highly attractive international markets across a range of diseases.
- Projects include new treatments for multiple sclerosis, cystic fibrosis, rheumatoid arthritis, chronic bronchitis and bronchiectasis, as well as a lung function test for people with airway diseases, including asthma, which is already in the final stage of clinical trials.
- Committed to building a fully integrated specialist pharmaceutical company with activities spanning research & development through to manufacture, marketing and distribution.
- Supported by an experienced board of directors and led by a management team with a proven track record in developing and commercialising breakthrough products.
- · Committed to realising attractive returns for our stakeholders.

#### Quarter Highlights

- Raised \$25 million through an initial public offering of 50 million shares at 50 cents per share listing on the ASX in November 2003 (ASX code: PXS).
- Commenced Phase II clinical trial with Bronchitol™ for Bronchiectasis.
- Commenced Phase III clinical trial with Aridol™ as lung function test.
- Regulatory approvals received for Phase II clinical trial with Bronchitol<sup>™</sup> for cystic fibrosis.

#### Expected Key Milestones/Activities – January to June 2004

#### February

- Half year financial results lodged with ASX.
- Initial clinical trials update Aridol™ and Bronchitol™.
- Provisional patent filing covering new series of anti-inflammatory agents.

#### April

• Quarterly report to Shareholders available.

#### June

- Scheduled completion of Aridol™ Phase III clinical trials.
- Scheduled completion of bronchiectasis Phase II clinical trial™.

#### Facilities update

We have recently completed a refit of our state of the art facilities at Frenchs Forest (NSW) to cater for the relocation of the clinical trial and drug development group from Canberra. This team has been with the company since its inception and have moved to Sydney to progress efficiently the development of Aridol $^{\text{TM}}$ , Bronchitol $^{\text{TM}}$ , PXS2000 and PXS25.

"Consolidation of operations in Sydney"

"Shares commence

trading on the

Exchange"

Australian Stock

"Management team strengthened to support commercial roll-out of Aridol"

"Expansion of potential markets for Aridol as a result of three new clinical research agreements"

"New molecule discovered as potential treatment for rheumatoid arthritis"

"PXS25 passes additional preclinical hurdles and remains on-track in development"

#### Personnel

Gary Phillips joined the company in December 2003 as Commercial Director and will oversee the worldwide launch and commercial development of Aridol™. Gary is an experienced healthcare manager and was most recently the CEO of Novartis Australia and has an excellent track record in marketing and sales with new product launches and customer targeting programs. Gary is already making an important contribution to the growth of the business.

Ron Sinani has joined us from Abbot to look after our regulatory affairs function with an immediate focus on the registration of Aridol™ in Australia, USA and Europe. Ron has seven years Regulatory Affairs experience gained at organizations such as Sandoz (now Novartis) and Covance.

#### **Business Development**

Prior to registration of Aridol™ we aim to give opinion leading physicians in key international markets hands on experience of the product, allowing them to confirm its benefits over existing lung function tests. This will provide us with powerful advocates in major markets, increase the body of evidence supporting Aridol™ and facilitate its market penetration after registration. In the last quarter, we have signed clinical trial agreements with leading research centres in Denmark, Switzerland and the UK. The Danish study has now commenced and the Swiss and UK studies will commence by mid year.

#### Research

Our research facility is located within the Australian National University campus in Canberra and our research interests are focused on discovering new treatments for autoimmune disease. Both PXS25 and PXS2000 are products of this research.

#### PXS2000

- PXS2000, a new class of anti-inflammatory molecules, continues to perform well in the preclinical testing phase, including models of multiple sclerosis and rheumatoid arthritis.
- A close structural relative, PXS2030, has emerged with enhanced activity.
   This compound is undergoing evaluation as a potential clinical candidate.
- PXS research team has also developed a completely new structural class of anti-inflammatory agents and these are the subject of a new provisional patent application that has been lodged in the USA by our US patent attorney.

#### Preclinical Development

- Successful pilot scale up manufacture of PXS25.
- Expected delivery of first GLP batch of PXS25 Feb 2004.
- PXS25 continues to perform well in preclinical safety evaluation.

PXS25 has been identified previously as a strong clinical candidate for the treatment of autoimmune diseases such as multiple sclerosis. The initial scale up manufacture of PXS25 has been contracted to a company with specialist expertise in this area. The manufacturing process has been smooth and we anticipate delivery of the first product batch in February 2004.

PXS25 continues to perform well in preclinical testing and recent results indicate the molecule has a high level of selectivity for its biochemical target. This means that the risk of serious adverse events is reduced and augurs well for its further development. The company is on track to have the preclinical development work completed by Q4 2004 and to commence clinical testing in healthy volunteers shortly thereafter.

### "Aridol clinical study on track"

"First leg of bronchiectasis study completes patient recruitment"

"Cystic fibrosis study commences patient enrolment"

#### Clinical Development

#### Aridol™

- A lung function test for evaluating the severity of asthma in patients and their response to medication.
- Clinical trials that will allow registration of Aridol™ in Australia and Europe are on schedule.
- Enrolment on target for completion by the middle of 2004.
- High level of interest in Aridol™ from leading physicians allowing PXS to investigate additional product claims. These potential claims include:
  - Improving asthma patient management through correct dosing of medication.
  - Identification and management of COPD patients who would benefit from steroid medication.

#### Bronchitol™

- Currently being evaluated as a therapeutic option for people suffering from diseases such as cystic fibrosis, bronchiectasis and chronic bronchitis.
- Has been designed to enhance lung clearance, improving lung function and providing a better quality
  of life to patients.
- A 60 patient clinical trial is being conducted in Australia and New Zealand in volunteers with bronchiectasis.
- First phase of the study has completed enrolment, interim analysis of data will be conducted in mid-Feb
  2004. This analysis is designed to give an indication of the level of benefit to the patient, to ensure the
  patients are not being subjected to adverse events and that it is safe and ethically appropriate to continue
  with the study.
- A 60 patient study is being conducted throughout Australia in volunteers with cystic fibrosis. All necessary
  approvals have been received for the study, the study drug has been shipped to the centres and
  enrolment is in progress. It is anticipated that this study will report in the middle of the year.

#### **Financial Highlights**

## "Expenditure within budget"

	Half Year Ended 31 December		
	2003	2002	
	\$	\$	
Financial Performance			
Revenue – other	975,219	344,562	
Expenses			
Research & development	(2,186,062)	(753,706)	
Administration	(851,743)	(312,069)	
Net loss before and after tax	(2,062,586)	(721,213)	

	31 December 2003	30 June 2003	
	\$	\$	
Key Balance Sheet Items			
Cash and bank accepted commercial bills	27,726,394	7,383,923	
Plant and equipment	1,479,577	1,515,016	
Intangible assets	1,191,613	1,205,000	
Total assets	31,188,195	10,494,556	
Total liabilities	466,437	604,495	
Total shareholders' equity	30,721,758	9,890,061	

- Cash and bank accepted commercial bills totaled \$27.7 million at 31 December 2003. We are therefore well positioned to fund our ongoing research, development and our new clinical trial programs.
- The increasing level of activity in pre-clinical development and clinical trials has resulted in increased research and development expenditure and this trend will continue in coming quarters.
- Revenue in the current period included interest earned on invested cash funds and payments received under the company's R&D Start Grant for the development of new treatments for cystic fibrosis.
- Projected cash usage for staffing, overheads and research and development expenditures remain on track.
- The Directors' Report in the 31 December 2003 Half Year Financial Statements contains a review of the half year financial performance.

#### Intellectual Property

Our patent portfolio continues its journey without problems through the approval stages in the various territories. In addition, we have filed a new US provisional patent as described under the research section.

"New US provisional patent filed"

	USA	Europe	Australia	ROW
Patent Family 1 – The use of Inhaled Mannitol	G	Р	G	P/G
Patent Family 2 – Phosphosugar based anti-inflammatory and/orimmunosuppressive drugs	G	G	G	G
Patent Family 3 – Novel phosphosugars and phosphosugar-containing compounds having anti-inflammatory activity	G	-	G	-
Patent Family 4 – Novel compounds and methods	Р	Р	Р	Р
Patent Family 5 – Novel phosphotetrahydropyrans and methods	prov	-	_	_
Patent Family 6 – Novel Cannabinoid CB-2 Receptor Agonists and Uses Thereof	prov	-	-	-

<sup>\*</sup>G = granted; P = pending; prov = provisional; ROW denotes rest of the world including Japan

#### **Publications**

Aridol™ and Bronchitol™ have been the subject of more than 25 publications in peer reviewed journals by a variety of research laboratories throughout the world. Two recent publications further testify to the benefit of using Aridol™ for lung function testing.

1. Sensitivity and Validity of Three Bronchial Provocation Tests to Demonstrate the Effect of Inhaled Corticosteroids in Asthma by Koskela et al, in Chest, 2003; 124:1341-1349.

Inhaled corticosteroids are the mainstay of asthma treatment but there are no registered lung function tests available to guide physicians in their use. This paper concluded that Aridol™ was both a sensitive and valid test to demonstrate the effects of inhaled corticosteroids in asthma and had advantages over both the other tests in the study.

2. Repeatability of Bronchial Responsiveness to Mannitol Dry Powder in Children with Asthma by Barben et al., in Pediatric Pulmonology, 2003; 36:490-494.

This paper concluded that Aridol™ is a convenient challenge which is easy to administer and is well tolerated by children. The study was conducted by the Department of Respiratory Medicine, Royal Children's Hospital in Melbourne.

"Two recent publications further testify to the benefit of using Aridol for lung function testing"

<sup>\*</sup>Details of the patent portfolio can be found in the prospectus

"Pharmaxis Board adopts Corporate Governance Framework"

#### Governance

The Pharmaxis Board has adopted a plan for the implementation of a corporate governance framework including policies and procedures, which will result in all aspects of the plan being operational by 30 June 2004.

The Board has been mindful of the Principles of Good Corporate Governance and Best Practice Recommendations issued by the ASX Corporate Governance Council in March 2003, and other current best practice guidance in establishing its policies. The policies and procedures will be posted on the Pharmaxis website by June 2004.

Alan D Robertson

Chief Executive Officer

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#### Contact Details

Further information on Pharmaxis can be obtained from www.pharmaxis.com.au or by contacting the Company Secretary.

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