pharmaxis

Quarterly Report to Shareholders

Issue 37 | Oct – Dec 2012

Pharmaxis Ltd ABN 75 082 811 630

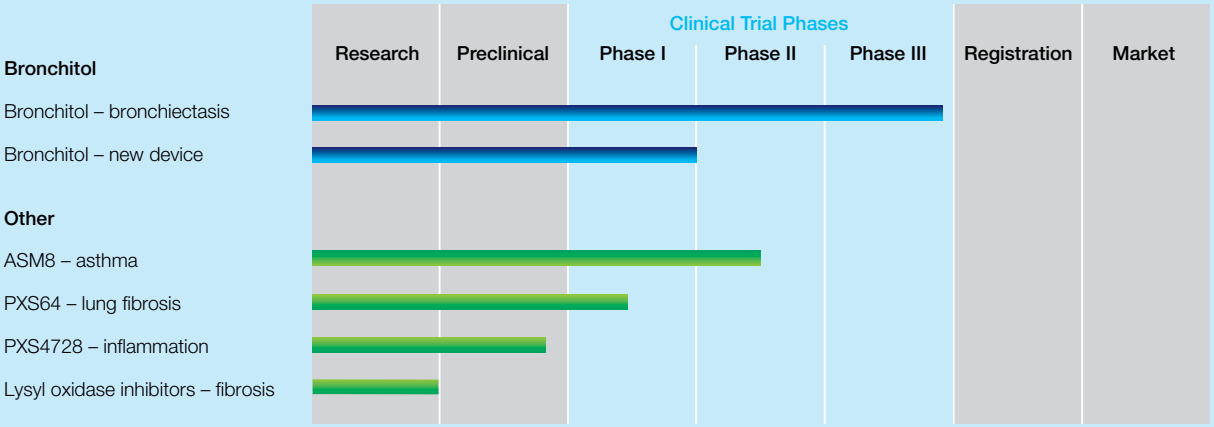
Overview of Pharmaxis

The Business

Pharmaxis Ltd is a speciality pharmaceutical company bringing new medicines to people with difficult, hard to manage diseases. The company is based in Sydney, Australia where its leading products are manufactured for local and overseas markets. In addition, the company has sales and marketing offices in the UK that manage the European sales and marketing effort and on the east coast of the USA. Pharmaxis is one of the few companies to have guided a new pharmaceutical through clinical development while simultaneously solving complex manufacturing issues. Most recently, the company has secured pricing and reimbursement for its products in a challenging health economic climate where many budget holders are reluctant to pay for innovation.

Behind the marketed products of Aridol and Bronchitol there are a series of new products in development. These products have been developed by an active research and development group within the company. Right now, our activities are centred around diseases that mainly affect the respiratory tract and include cystic fibrosis, bronchiectasis, asthma and chronic obstructive pulmonary disease.

New products in development at December 2012



Aridol

Aridol® is a bronchial challenge test and is being sold and marketed in Australia, Europe, South Korea and the United States. Aridol is designed to assist in the detection of hyper-responsive airways – a hallmark of asthma.

Bronchitol

Bronchitol® has been designed to assist with lung clearance and lung defence for people with cystic fibrosis and bronchiectasis. The drug is now approved for marketing in Europe and Australia and a marketing application is under review by the U.S. FDA. A Phase III clinical trial to expand the indication into bronchiectasis is in its final stages.

ASM8

ASM8 is an anti-inflammatory drug delivered to the airways, designed to treat allergic asthma and is for people not responsive to currently approved asthma medications.

PXS64

PXS64 is an anti-fibrotic drug that inhibits the function of TGFβ and is extremely effective in preclinical models of fibrosis. The drug is targeting fibrosis of the lung.

PXS4728A

PXS4728A is a new anti-inflammatory drug delivered orally and is scheduled for Phase I clinical trials in 2013.

CEO Report

This report to shareholders covers the three months to the end of December 2012. Building on the achievements of 2012 Pharmaxis looks forward to 2013 as a transformative year for the business, as many of our most exciting projects reach a conclusion. Chief among these is the commercialisation of Bronchitol for cystic fibrosis. Last year we secured the marketing approval of Bronchitol in Europe and navigated a variety of pricing and reimbursement processes to make Bronchitol available to patients in a cost effective manner.

Bronchitol was launched in Germany in June 2012 at the European cystic fibrosis (CF) meeting in Dublin. Since then, we have concluded negotiations with the UK pricing authority and Bronchitol is available on a fully subsidised basis in England and Wales to patients aged 18 and over. In addition, it has been available since the 1st of August on a subsidised basis for some patients in Australia aged 6 and over. Reimbursement discussions require patience and we have applications underway with authorities in Ireland, Scotland and France.

Bronchitol reimbursement finalised in the UK

This has been the culmination of a good deal of effort over many years and it's extremely gratifying to have Bronchitol commercially available. During its development, we have been greatly heartened by the support from patient groups and from clinicians working in the field. This type of support makes all the difference. Of course, cystic fibrosis is a disease from birth and it is important that Bronchitol is made available to people as young as possible and, to that end, we have embarked on an additional clinical trial in people between the ages of 6 and 17, specifically for patients in Europe. This trial is similar to our other trials and has FEV_1 as the primary endpoint and is part of our agreement with the EU pharmaceutical regulator.

Bronchitol to feature in FDA advisory meeting

In addition to the work in cystic fibrosis, we completed patient enrolment into a major clinical trial in bronchiectasis. This was a large Phase 3 trial designed to determine if long term treatment with Bronchitol will reduce the number of infectious episodes for people with bronchiectasis. If the trial is successful in meeting its main objective, then it opens an additional market for Bronchitol — a market that is currently poorly served and for which there is little competition. Presenting the outcomes from this trial will be a key event for 2013.

More immediate, however, is the impending FDA decision on the marketing application for Bronchitol in the USA and we all look forward to passing that hurdle and being in a position to make Bronchitol available to patients throughout the USA.

2012 represented the year where Pharmaxis moved to a structured operating business marketing both Aridol and Bronchitol. Our long term growth, however, also relies on innovation and Pharmaxis will be reporting on several projects as they move through their respective development gates during the course of 2013.

Alan D Robertson, Chief Executive Officer

Forthcoming Events

- A US FDA advisory committee meeting on 30th January to discuss the Bronchitol US marketing application
- US FDA decision on Bronchitol marketing application on 18th March
- Results from the Phase 3 Bronchitol bronchiectasis clinical trial (B305)

Bronchitol for cystic fibrosis in Europe

Bronchitol now reimbursed in England and Wales

Bronchitol is available through selected European countries but, so far only in Germany on an unencumbered basis. For example, while Bronchitol has been determined to be a cost effective use of the UK's health care budget, not all hospital formulary applications have been processed and there are cost effectiveness discussions in progress in Scotland, Ireland and France. This will be a major focus of attention during the early part of 2013.

Germany represents the largest market in Europe and we have a team of highly educated and motivated sales and marketing professionals responsible for the introduction of Bronchitol. The team in Germany report to our Head of European Operations in England. During the quarter an important local CF meeting took place in Germany and this was an opportunity for the company to present the benefits of Bronchitol in a highly focussed setting. A major effort goes into education and awareness and emphasising the need for effective mucus clearance to maintain healthy lungs. While it is important for the CF community to be aware of the product, it is also important to understand how to get the best out of the product, what to expect when it is used for the first time and the importance of using Bronchitol according to the approved instructions. This is a highly patient focused sales and marketing effort with the group concentrating its efforts on the specialised CF centres throughout Germany.

After Germany, France and the UK are the largest individual EU markets and pricing and reimbursement matters are in their final stages. During the quarter, the UK's National Institute for Health and Clinical Excellence determined that Bronchitol was an effective use of NHS resources and we are currently completing applications to have it included in the various formularies and budgets in England, Wales and Northern Ireland.

Additional European countries will be made available during 2013, so that by the end of the year we would expect to be operating in all the major CF markets of Europe.

Bronchitol is approved in Europe for people with CF aged 18 and over. It is important that people with CF have access to Bronchitol as early as possible in their life because it offers the possibility of slowing loss of lung function. In order to expand the current indication to people aged 6 and over a clinical trial design has now been approved by the European regulator that meets our post approval commitment of earlier in the year. This trial will study the effects of Bronchitol on lung function over an 8 week period in children and adolescents and is scheduled to start in early 2013. The primary endpoint of the trial will again be lung function and the results from the trial are expected in 2014.

Bronchitol for cystic fibrosis in Australia

Bronchitol included on PBS

Before a new drug can be included on the list of drugs approved for reimbursement by the Australian government, an application has to be made to the Pharmaceutical Benefits Advisory Committee, which determines the cost effectiveness of new medicines. Bronchitol has been the subject of this review and, as from the 1st of August 2012, has been included on the Pharmaceutical Benefits Scheme. While the current listing is somewhat cumbersome, we continue to work with PBAC in order to streamline the process and facilitate easier access to Bronchitol on a reimbursed basis.

Australia has nearly 3,000 patients with cystic fibrosis treated through 22 centres and Bronchitol has marketing approval for those patients with CF 6 years of age and over.

Bronchitol for cystic fibrosis in the United States

Bronchitol FDA review date finalised

The USA represents the largest single market opportunity for Bronchitol and to access that market and have Bronchitol available to US citizens, an approval from the Food and Drug Administration (FDA) is required. In common with other major regulatory agencies the FDA undertakes a very thorough review of the assembled data but, in contrast to other regulatory agencies, the FDA has access to the primary data and undertakes its own statistical analysis. In addition, before reaching a conclusion on the approval or otherwise of an application, the FDA will often convene a scientific advisory committee meeting to provide guidance on the risks and benefits associated with any new drug.

The Bronchitol marketing application, or NDA, was submitted in mid-2012 and a target completion date for the review has been set as 18 March 2013. Before that date is reached, however, Bronchitol will be the subject of an in depth review by the FDA's scientific advisory committee and that review is scheduled for the 30th January 2013. Although the FDA is not bound to accept the recommendation of the advisory committee the FDA will pay attention to the deliberations of the committee. The advisory committee meeting members will be asked to consider some key topics and, at the end of the meeting, will be asked to vote on a number of specific questions. These usually relate to safety and effectiveness.

Bronchitol heads for FDA advisory committee

The USA has around 30,000 people with cystic fibrosis and the patients are managed through a very centralised process involving only around 250 centres for the whole country. The Pharmaxis US office is located near Philadelphia and will represent the commercial hub of operations once Bronchitol has completed its FDA review. Presently, the US office is continuing to introduce Aridol to an increasing number of US centres and is also actively engaged with the CF community including the patient groups and CF centres supporting good practice education in airways clearance.

Bronchitol for bronchiectasis

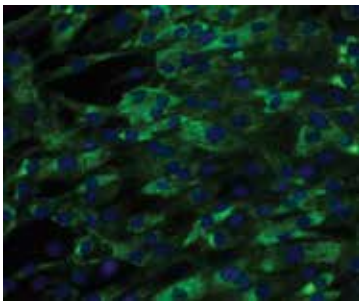
Bronchiectasis represents an important opportunity for the company given that it is a condition that affects many more people than cystic fibrosis. Moreover, there are few treatment options available for people with bronchiectasis and many of the established CF drugs have proven not to be effective.

A Phase III clinical trial involving 485 subjects with a confirmed diagnosis of bronchiectasis is in progress to determine if treatment with Bronchitol over the course of 1 year can improve the incidence of exacerbations (or worsening of symptoms). Exacerbations are a feared consequence of bronchiectasis which can mean a patient suffers difficulty breathing, excessive coughing and mucus production, loss of lung function and a requirement for antibiotics. On many occasions during an exacerbation, the patient will be admitted to hospital for treatment. The Bronchitol trial is double blind, which means neither the patient nor the clinician is aware of the study medication they have been assigned and the trial remains that way until all patients have completed. 95% of subjects entered into the trial have now completed and once the remaining subjects have finished, we will be able to review the data. The trial data is due to be reported during the second quarter of 2013. The purpose of the trial is to provide sufficient data to seek a marketing approval for Bronchitol to treat bronchiectasis.

Aridol sales increase over previous quarter

Aridol as a bronchial challenge test

Aridol is dry powdered mannitol delivered to patients at increasing doses. Between each doubling of dose the patients lung function is tested by spirometry. An Aridol challenge test is conducted in the setting of a specialist clinic or lung function testing laboratory and has now become one of the standard tests to detect hyperresponsive airways – a feature of asthma. Aridol sales this quarter represent an improvement of 11% over the previous quarter. The sales increase was driven largely by the US market.



Fluorescent picture of human lung fibroblasts producing collagen.

New Product Development

The franchise that is represented by Aridol and Bronchitol underpins the value of the business today and will continue to do so for many years to come. Pharmaxis has a number of patents protecting our innovation and some of these have recently been extended in Europe. For example, the basic patent covering Bronchitol was recently extended in Germany and Spain through to 2020 and we expect other extensions to follow. In addition the company is working on a next generation version of Bronchitol that will give the patient quite a different experience when taking the drug. We will also be looking to expand the indications beyond cystic fibrosis and bronchiectasis for which Bronchitol can be used. For the longer term the objective is to develop new products for new indications and the research group is working on clinical advances in the field of respiratory medicine.

ASM8 for asthma

ASM8

ASM8 is an inhaled oligonucleotide that is under development for the treatment of severe persistent asthma that is resistant to existing treatments. As an oligonucleotide, ASM8 has been designed to reduce the cellular synthesis of the key drivers of inflammation that makes treating asthma with traditional drugs so difficult. ASM8 has been the subject of a number of well controlled trials, the most recent of which was published early in 2012. In this trial ASM8 improved the lung function of people with allergic asthma and provided a basis from which to design further, more extensive, clinical trials.

PXS64 for fibrosis

PXS64

PXS64 is the prodrug of PXS25 which inhibits the function of TGFβ. TGFβ is a protein that has been recognised as an important driver of fibrosis and scarring evident in people with pulmonary fibrosis. PXS64 delivers PXS25 to the inside of the cell, where it is able to inhibit the processing of TGFβ and reduce collagen deposition and cell transformation. PXS64 will be delivered to the lung in patients with Idiopathic Pulmonary Fibrosis (IPF) and is likely to be complementary to approaches to this disease being worked on by other pharmaceutical companies. The anti-fibrotic area of research has recently generated strong interest within the pharmaceutical industry and while our focus is in lung fibrosis, PXS64 could also find utility in kidney and liver fibrosis.

PXS4728 for inflammation

PXS 4728A

PXS4728A is a selective inhibitor of SSAO – a protein that has been implicated in driving important inflammatory processes. PXS4728 is a small molecule inhibitor of this protein and is delivered to the patient in a tablet once per day. In an extensive set of preclinical studies, PXS4728 has demonstrated robust, reliable and reproducible ant-inflammatory activity. Inflammation of the lung, for example, is a key component of asthma and Chronic Obstructive Pulmonary Disease. The preparation of PXS4728A has been scaled up and it is currently the subject of an extensive preclinical safety programme ahead of clinical trials in humans. The first human trials are currently scheduled for 2013.

Lysyl Oxidase Like-2 inhibitors

Lysyl oxidase inhibitors are an important new target for treating fibrosis and metastatic cancer. An antibody that inhibits this target is in development by a US company and has provided important target validation. The first small molecule inhibitor of this protein has been discovered by Pharmaxis and is undergoing preclinical evaluation before being considered for full preclinical development. This compound has great potential not only for tackling pulmonary fibrosis but also for treating cancer. Some of this groundbreaking work was presented at a recent European scientific meeting.

Financial Overview of the Quarter

Pharmaxis finished the quarter with $65 million in cash.

For the December 2012 quarter, sales of $838,000 compared to $341,000 in 2011 and $584,000 in the September 2012 quarter. Sales of Bronchitol for the quarter were $455,000 compared to $237,000 in the September 2012 quarter, with Germany and Australia making up approximately 67% and 29% of Bronchitol sales respectively.

Grant and other income include the Australian R&D tax incentive receivable on eligible research carried out during the current quarter.

Commercial expenses of $3.7 million compares to $2.7 million in 2011 and $2.9 million in the September 2012 quarter. The current quarter includes increased direct promotional expenses associated with the launch and sale of Bronchitol in Europe and Australia.

Regulatory and medical affairs expenses, previously included within research and development, are directed at obtaining and maintaining product approvals, monitoring and reporting product safety to regulatory agencies and reviewing material provided to clinicians and patients by the Company. Expenses for the quarter of $1.9 million compares to $1.3 million in 2011 and $1.5 million in the September 2012 quarter, reflecting costs associated with seeking approval for Bronchitol in the US.

Pharmaxis receives $4.6 million for its 2012 Australian R&D tax incentive claim.

Finance & administration expenses of $1.6 million compares to $1.8 million in 2011 and $1.6 million in the September 2012 quarter.

Research and development expenses of $6.7 million compares to $6.9 million in 2011 and $6.5 million in the September 2012 quarter. Research and development includes drug discovery and development, clinical trials and manufacturing development.

Operating activities used cash of $6.1 million compared to $8.4 million in 2011 and $9.9 million in the September 2012 quarter. During the current quarter the Company received $4.6 million in relation to its 2012 Australian R&D tax incentive claim.

Financial Statement Data – Unaudited
(International Financial Reporting Standards)

('000 except per share data)

Income Statement Data

	Three months ended		Six months ended	
	31-Dec-12	31-Dec-11	31-Dec-12	31-Dec-11
	A$	A$	A$	A$
Revenue from sale of goods	838	341	1,422	660
Cost of sales	(282)	(132)	(509)	(254)
Gross profit	556	209	913	406
Interest income	612	582	1,311	1,032
Grant and other income	1,435	1,598	3,212	1,672
Expenses				
Commercial	(3,742)	(2,650)	(6,644)	(4,386)
Regulatory, safety & medical affairs	(1,869)	(1,273)	(3,417)	(2,303)
Finance & administration	(1,807)	(1,850)	(3,418)	(2,973)
Research & development	(6,208)	(6,866)	(12,690)	(13,057)
Total expenses	(13,626)	(12,639)	(26,169)	(22,719)
Loss before income tax	(11,023)	(10,250)	(20,733)	(19,609)
Income tax expense	(26)	94	(42)	94
Loss for the period	(11,049)	(10,156)	(20,775)	(19,515)
Basic and diluted earnings (loss) per share – $	(0.036)	(0.041)	(0.067)	(0.082)
Depreciation & amortisation	1,149	1,169	2,297	2,347
Fair value of securities issued under employee plans	477	302	876	545

Balance Sheet Data

	As at	
	31-Dec-12	30-Jun-12
	A$	A$
Cash and cash equivalents	64,863	81,475
Property, plant & equipment	26,406	27,683
Intangible assets	13,262	14,143
Total assets	112,492	131,700
Total liabilities	(22,352)	(21,897)
Net assets	90,140	109,803

Cash Flow Data

	Three months ended		Six months ended	
	31-Dec-12	31-Dec-11	31-Dec-12	31-Dec-11
	A$	A$	A$	A$
Cash flows from operating activities	(6,085)	(8,421)	(15,948)	(19,078)
Cash flows from investing activities	(114)	(38)	(258)	46
Cash flows from financing activities	(119)	75,988	(411)	75,868
Impact of foreign exchange rate movements on cash	3	(56)	5	23
Net increase (decrease) in cash held	(6,315)	67,473	(16,612)	56,859

Share Data

	Ordinary Shares as at	
	31-Dec-12	30-Jun-12
Ordinary shares on issue	308,543	307,631
Options over ordinary shares outstanding	11,169	11,822

pharmaxis

Contact Details

Further information on Pharmaxis can be obtained from www.pharmaxis.com.au or by contacting David McGarvey, Chief Financial Officer:

Telephone: +612 9454 7200
david.mcgarvey@pharmaxis.com.au

Pharmaxis Ltd
ABN 75 082 811 630
20 Rodborough Road
Frenchs Forest NSW 2086

ASX Code: PXS
ADR Code: PXSLY