

PEP *Talk*

QUARTERLY REPORT TO SHAREHOLDERS
THREE MONTHS ENDED 30 SEPTEMBER 2005

*Results of four phase IIa
skin cancer trials in next
two quarters*

*Funding in place for
leukemia clinical trial*



Peplin

Pharmaceuticals for Life

HIGHLIGHTS FOR THE SEPTEMBER QUARTER

- Growing international and investor interest in PEP005 anti-leukemia drug:** we have seen a growing level of international interest in our leukemia program. We announced on 12 July that a television news story on the anti-leukemia properties of Peplin's lead compound PEP005 had been produced and screened in the United Kingdom by Channel 4 News. This quite extensive video clip reached approximately 11.5% of the British viewing audience and is available for replay in the news reports section of Peplin's website at www.peplin.com. This followed our publication of leukemia research results in *Blood*, the international peer-reviewed journal of the American Society of Hematology, in April and a report in *New Scientist* magazine in May.
- Capital raising to advance the leukemia program:** we were the beneficiary of significant investor interest in our leukemia program and closed an oversubscribed placement of shares to institutional and sophisticated investors in early August to raise \$4 million to fund final pre-clinical studies and a phase I/II clinical trial of our proprietary drug candidate PEP005 IV for leukemia. Peplin also announced a share purchase plan for existing shareholders at the placement price of \$0.35 per share; this was well supported and raised a further \$1.5 million by the end of August.
- Progress on the three phase IIa skin cancer clinical trials in Australia:** the final patients enrolled for the actinic keratosis (AK) clinical trial were completing their three month follow-ups during the quarter, as scheduled. Data continued to be recorded and collected for all patients in the trial ahead of the analysis, evaluation and reporting of results scheduled for the December quarter. Enrolment for the two basal cell carcinoma (BCC) clinical trials continued during the quarter, as scheduled.
- Phase IIa dose escalation clinical trial commenced in the US:** we initiated at the end of August a US phase IIa dose escalation clinical trial of PEP005 Topical to treat an area of skin with AK. Because the design of this trial is to apply progressively increasing doses of drug onto an area of sun damaged skin, and thus seek to establish a maximum tolerated dose of drug, its timetable to completion is difficult to predict. However based on very satisfactory progress of this trial to date, we would expect to be in a position to discuss progress and preliminary results before the end of December 2005.
- Results of four phase IIa clinical trials to be reported by Peplin during the next two quarters:** the initiation of the US phase IIa dose escalation clinical trial brought to four the number of phase IIa trials currently being conducted by Peplin. The results of each of these trials are expected to be reported during the next six months.
- Annual results announced for 2004/05:** on 9 August, Peplin announced its results for the 2004/05 financial year and followed up on 1 September with the release of its annual report for 2005 and the notice of this year's annual general meeting (AGM) of shareholders on 14 October.
- Retirement of Wayne Goss from the Board of Peplin:** we announced on 30 August that Wayne Goss would retire from Peplin's Board of Directors after this year's AGM. Mr Goss made the decision due to an increased workload following his appointment as National Chairman of professional services firm Deloitte Touche Tohmatsu in the middle of 2005.

SUMMARY SEPTEMBER QUARTER FINANCIALS

Cash flows	September quarter (\$'000)	Last four quarters (\$'000)
Net operating cash flows	(2,563)	(6,795)
Net investing cash flows	(120)	(377)
Net financing cash flows	5,190	14,697
Net increase / (decrease) in cash held	2,507	7,525
Cash position at end of quarter	11,752	

- Cash-on-hand at 30 September 2005 totalled \$11.8 million, up \$2.5 million from the 30 June 2005 balance.
- Net operating cash outflow during the quarter of \$2.6 million was spent mostly on the conduct of the four phase IIa skin cancer clinical trials and related activities. These trials are within budget and on schedule to report results during the next two quarters.
- Net investing cashflows during the September quarter increased and are mainly associated with preliminary work to construct a new commercial scale manufacturing facility for the production of Good Manufacturing Practice (GMP) grade PEP005.
- Net financing cashflows are comprised mainly of the net proceeds from the placement to institutional and sophisticated investors and from the share purchase plan for shareholders. A total of 15.6 million new shares were issued at \$0.35 each for these capital raisings, bringing the number of shares on issue to just over 113 million.

MARKET POTENTIAL - AK AND NMSC

Actinic keratosis (AK), solar keratosis or sun spots is the very common (especially in Australia) dry scaly lesion that can occur on sun exposed parts of the body. It is the most common skin lesion in Caucasians and is more common in older people who have had a long term exposure to sun such as farmers or sailors. It affects over 10 million people in the US, and is a disease where the majority of people remain untreated. However it is a disease which should be treated as it can progress into a more dangerous form of skin cancer called squamous cell carcinoma.

Simply put, skin cancer is either melanoma or non-melanoma. And they could not be more different. Unlike melanoma, non-melanoma skin cancer (NMSC) is very common. Non-melanoma forms of skin cancer are either basal cell or squamous cell carcinoma. These are cancers and they will develop into a tumour but they tend not to spread aggressively through the body.

NMSC is the most common form of all cancers; it affects more than one million people a year in the US. It is growing at the highest rate of all cancers at 6-7% per year. It affects more people each year than all other cancers combined.

AK and NMSC are treated using both surgical and non-surgical approaches. AK is typically treated with cryotherapy; the lesions are destroyed using liquid nitrogen. It is quick, well established and well reimbursed and most practitioners believe it works very well. Its major short comings are due to the fact that cryotherapy stings, there is the potential for long term scarring and permanent whitening of the treatment site and it is not appropriate for the treatment of multiple and contiguous lesions across an area of sun damaged skin. NMSC is treated using various surgical techniques. These are effective in that if you cut a lesion out and you cut it all out, it will not come back. However surgery is costly and time consuming and has some obvious short comings with pain, morbidity and disfiguration on very cosmetically sensitive parts of the body.

There are a number of important considerations in assessing the size and growth prospects of this market. First, while it is a very common disease, the number of lesions which are treated each year is also growing very rapidly for three key reasons:

1. the ageing of the western world's population;
2. a history of outdoor life style; and
3. the various awareness campaigns which are encouraging people to have their skin checked and their skin lesions treated.

In addition people are increasingly looking to use topical products to treat this disease. And again there are three key reasons:

1. the new topical treatments are generally less invasive and painful;

2. awareness campaigns are also driving people into the clinic earlier which means that the lesion is smaller and more superficial and thus amenable to topical treatment; and
3. there is a burgeoning interest in the cosmetic outcome of the treatment alternatives offered. This baby boomer population group has more money than any in the past to pay for more cosmetically attractive treatment alternatives.

The new non-surgical approaches are defining the emerging component of this market. Generally these are topical prescription products. The growth and development of this market only improves the opportunity for PEP005 Topical. A major driver of future growth in this market may be demand from the large pool of currently untreated patients with this disease. Our formal market research has documented support among dermatologists, plastic surgeons and their patients for a convenient and elegant product which requires only a short course of treatment and works quickly with a favourable side effect profile and which has a superior cosmetic outcome. This may entice currently untreated patients to seek treatment. We believe that a rapidly acting treatment like PEP005 Topical will be very competitive in this growing market and that there is a very attractive market opportunity for PEP005 Topical.

Finally, any analysis of market potential needs to look at both number of treatments and also the cost per treatment. Peplin has not decided on a pricing strategy for its product candidate at this stage. However, for the purpose of illustrating a market potential, we have assumed a price based on alternative treatments of US\$150 per treatment for AK and US\$300 per treatment for BCC.

There are well validated projections of both the US total population and the US population over the age of 45 for the year 2010 and the year 2020. One of the major growth drivers referred to above was the "greying" of the population with a significantly larger proportion of the total population to be represented by those over 45 in 2020. There are good statistics to show that approximately 10.8% of the US population over the age of 45 suffers from AK. Accordingly population growth and ageing alone will drive the number of sufferers in the US from 10 million presently to 15 million in 2020.

As noted above, the present level of treatment is relatively low, whereby in the US only one third of people suffering from AK seek and receive treatment. Peplin's expectation is that the combination of various awareness campaigns and the availability of new and convenient medications are going to drive that proportion up and it may approach one half in 15 years' time. Based on this assumption we believe the number

MARKET POTENTIAL - AK AND NMSC continued

of AK patients being treated in 2020 will be in the order of 7.5 million in the US alone.

At US\$150 per treatment course the US market potential for just AK is US\$1.1 billion per annum, or in Australian dollars A\$1.5 billion p.a.

We do a similar analysis of the NMSC market size and growth potential, using similar time frames. This form of skin cancer is growing at a very high rate and more quickly than any other cancer. While industry sources have documented it as high at 6-7%, we have used a more conservative estimate of 5%. This indicates an incidence of 4.2 million skin cancers in the US in 2020. Unlike AK where many go untreated, virtually all NMSC will be treated. At an assumed US\$300 per treatment there is a market potential for NMSC in the US alone of approximately US\$1.2 billion per annum, or in Australian dollars A\$1.7 billion p.a.

When you combine the AK and NMSC markets in the US you have something close to US\$2.4 billion, or A\$3.2 billion per annum. Of course, this is only for the US market and while the US accounts for close to half of the world's pharmaceutical market, for a product like PEP005 Topical which is targeted to the Caucasian and more affluent markets, the US may account for a more substantial proportion of global sales, so one can assume it will be closer to 80% of the global market.

This indicates a potential combined worldwide market of A\$4 billion per annum. We believe this is a very attractive market opportunity and PEP005 Topical will be well positioned to secure a meaningful slice of this market. While there are a number of factors which will have an impact on market share, we believe we have identified and can deliver via PEP005 Topical the major product attributes which will drive market acceptance.

REGISTERED CLINICAL TRIALS on www.clinicaltrials.gov:

Peplin complies with emerging industry requirements to register its ongoing clinical trials with international databases. This is increasingly required by regulators and high profile peer reviewed scientific journals. Interested parties can review details of Peplin's ongoing clinical trials at the database maintained by the National Institute of Health (NIH) of the US. The relevant addresses for each study are:

<http://clinicaltrials.gov/ct/show/NCT00107965?order=1> for AK (note: recruitment is complete),

<http://clinicaltrials.gov/ct/show/NCT00108121?order=1> for nodular BCC,

<http://clinicaltrials.gov/ct/show/NCT00108134?order=2> for superficial BCC,

and

<http://www.clinicaltrials.gov/ct/show/NCT00239135?order=3> for AK dose escalation / field treatment clinical trial,

or you can search for Peplin at www.clinicaltrials.gov.



To help reduce the cost of paper, printing and postage, you can receive an e-mail notifying you of the release of company announcements, reports and other information. The e-mail will contain a convenient link to the information on Peplin's website.

To register for this service shareholders can simply visit the Computershare website at www.computershare.com and:

- click on **Investors**,
- click on **Email address update**,
- enter **PEP** in the field,
- enter your holder identification number (**HIN**) or Security Reference Number (**SRN**), name and postcode, and
- click **Submit** and follow the prompts.

An e-mail will be sent to you for confirmation. Simply click on **reply** and then **send**.

If you have registered at www.peplin.com to receive our PEPupdates, you will continue to receive these.

PLANS FOR THE DECEMBER 2005 QUARTER

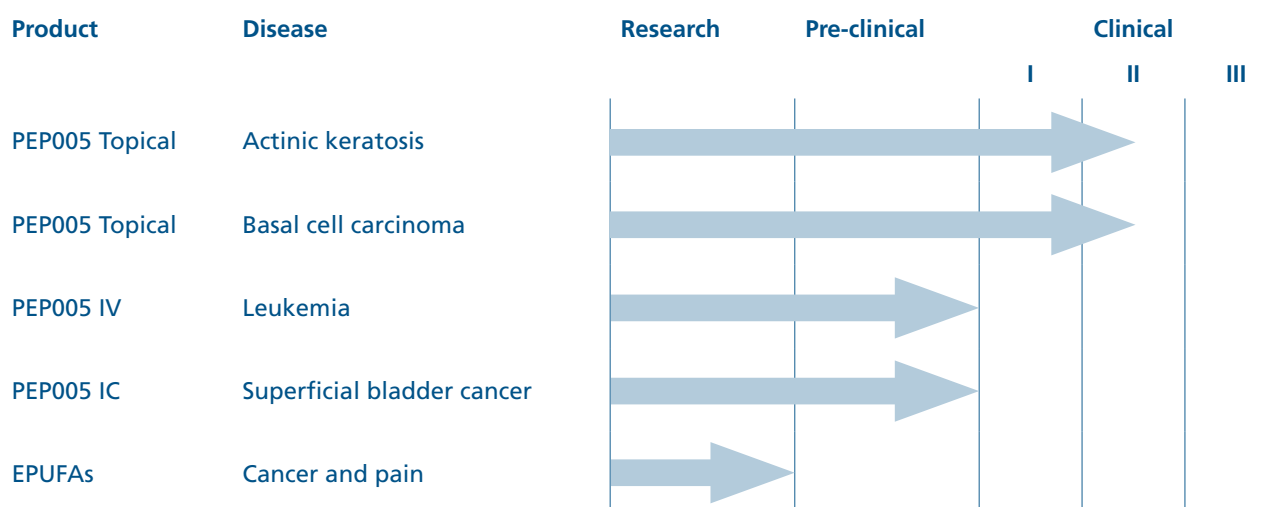
- Australian phase IIa clinical trial for AK - results are due to be reported in December:** The three month follow-up period for the last of the patients enrolled in the AK trial has been completed and data are being evaluated and analysed so that results can be reported by December 2005.
- Australian phase IIa trials for nodular and superficial BCC - complete enrolment as scheduled:** Enrolment for the two BCC phase IIa clinical trials continues as scheduled and is expected to be completed for both clinical trials in the December quarter of 2005 so that results of the first of these two clinical trials in BCC can be reported at around the end of the first quarter of 2006.
- US phase IIa dose escalation and area effect AK clinical trial - continue as scheduled during the December quarter:** This open-label, dose escalation, cohort study, to determine the maximum tolerated dose (MTD) of PEP005 Topical when administered once daily for two consecutive days on AK affected areas of skin of patients, was initiated at the end of August. Based on very satisfactory progress of this trial to date, we would expect to be in a position to discuss progress and preliminary results before the end of December 2005.
- PEP005 IV for leukemia - continue pre-clinical studies:** Continue with toxicology studies in progress as a pre-requisite for the filing of an Investigational New Drug (IND) application with the US Food and Drug Administration in the first quarter of 2006.
- Investment in a new commercial scale manufacturing facility for the production of GMP grade PEP005:** This facility, which integrates and consolidates Pep- lin's extraction and purification technologies under a single roof, is partly supported by the Queensland government's QIDS grants program. Commissioning of the facility and licensing to GMP standard is scheduled for 2006.
- Expenditure focused on skin cancer trials:** Most expenditure during the December quarter is expected to relate to the conduct or analysis of the four phase IIa clinical trials in actinic keratosis and two forms of basal cell carcinoma in Australia and the US. Additionally, investment will be made in the new commercial scale manufacturing facility for the production of GMP grade PEP005. All expenditure is fully funded by cash reserves on hand and the clinical trial expenditures remain within budget.

Michael Aldridge

Managing Director & Chief Executive Officer

21 October 2005

PRODUCTS IN DEVELOPMENT



PEPLIN OVERVIEW

Mission

We are dedicated to the development of prescription therapeutic products which allow people with cancer to live healthier, happier and longer lives.

Vision

Peplin's vision is to deliver superior returns to shareholders through a focus on developing and commercialising therapeutic products for the global market.

Peplin's first goal is to dominate the skin cancer market by delivering a novel product for the treatment of skin cancer. Peplin will build on that foundation to deliver market leading products for other fields of cancer.

Business

Peplin Limited is a public company based in Brisbane, Australia, focused on the development and commercialisation of proprietary prescription pharmaceutical products for the treatment of cancer. Its shares are listed on the Australian Stock Exchange (ASX).

Technology

Peplin has a patent protected technology comprising a new class of naturally occurring molecules which show significant potential as anti-cancer agents for a wide range of human cancers. Peplin's lead molecule in this technology is PEP005, which is chemically described as 3-ingenol-angelate. PEP005 has demonstrated powerful anti-cancer effects by way of a unique mode of action, and Peplin is the first to take this class of molecule into clinical development. Peplin holds global proprietary rights to the use of PEP005 in all oncology and other diseases.

Lead product

Peplin's lead compound is PEP005, the first in a new class of investigational agents. Peplin's lead product is PEP005 Topical, which is being studied in phase IIa clinical trials for the treatment of actinic keratosis (AK) (a pre-cancerous lesion) and non-melanoma skin cancer (NMSC). PEP005 Topical works by a powerful mode of action, directly killing most cancer cells and then recruiting and activating the local immune system to clean-up these dead cancer cells and kill any remaining cancer cells. PEP005 Topical is potentially a rapidly acting and cosmetically attractive non-surgical treatment for AK and NMSC. Peplin's product development activities are supported by the Australian Federal Government under its Pharmaceuticals Partnerships Program.

Market opportunity

PEP005 Topical's market opportunity is significant. AKs are the most common pre-cancerous skin lesions worldwide and the treatment of AKs is the most common dermatologic procedure performed in the out-patient setting.

In the US each year there are 3.7 million office visits and about 5.2 million procedures for AK. According to the American Academy of Dermatology AK affects more than 10 million Americans. The worldwide prevalence of AK is highest in Australia. AKs typically occur on sun damaged skin of Caucasians older than 40 years.

NMSC is the most common form of cancer worldwide. According to the NCI it affects more than one million people per year in the US. According to the Cancer Council Australia of all cancers NMSC is the biggest burden on the healthcare system accounting for \$232 million per year in treatment costs. Peplin is developing PEP005 Topical to address the highly attractive and significant global market opportunity for non-surgical approaches to the treatment of AK and NMSC.

Leukemia is a cancer of the blood and blood forming organs. According to the Leukemia & Lymphoma Foundation there will be an estimated 34,810 new cases of leukemia in the US in 2005. According to the Leukemia Foundation in Australia there are 2,370 people diagnosed with leukemia each year.

The most common type of leukemia is acute myeloid leukemia or AML which is estimated to strike 11,960 people this year in the US. AML is both the most common and the most devastating form of leukemia with a 5 year survival rate of less than 20%.

Pipeline

Peplin's earlier stage pipeline is targeted at leukemia (a blood borne cancer) using its lead compound PEP005 in an intravenous formulation (PEP005 IV) and bladder cancer using an intra-cavitary or intravesical formulation (PEP005 IC). PEP005 has demonstrated selective and potent anti-leukemia activity in pre-clinical disease models. PEP005 induces apoptosis in leukemia cells via the activation of PKC delta. Peplin holds global proprietary rights for PEP005 Topical and other oncology applications of PEP005. Its research portfolio of EPUFA compounds opens additional potential opportunities particularly in cancer and pain.