

PEP *Talk*

REPORT TO SHAREHOLDERS
SEPTEMBER 2008

An exciting new chapter

HIGHLIGHTS

- Treated the first AK patient in our pivotal Phase III clinical trial for lesions on non-head locations
- Funding in place for Phase III development program
- Early enrolment completion in Phase IIb trial
- Management changes to bring new experience



Peplin

LETTER FROM THE CEO



I welcome you to this, my first issue of *PEPTalk*. *PEPTalk* was designed to provide a communication channel from Peplin to our shareholders and I intend to continue this channel of communication. However, it is also my objective to ensure each one of our shareholders feels he or she is well informed of our plans and progress.

To that end, I am committed not just to *PEPTalk*, but to keeping you informed through frequent meetings and an open communication policy where employees, shareholders, and collaborators feel free to contact me at any time.

I could not be more excited to join Peplin as the CEO. We are embarking on what we believe will be our final clinical development activities for PEP005 in actinic (solar) keratosis and are beginning the initial activities to prepare for the successful commercialisation of PEP005. We will also continue to move the development programs forward for basal cell carcinoma.

I have been fortunate in my career to lead two organisations from start-ups to significant, successful, and respected companies in their respective markets. The hallmarks of those companies were great products and great people. We combined those attributes with a commitment to quality and communication with our customers and other stakeholders.

I believe Peplin represents an equally exciting opportunity to build a successful company with significant shareholder value. Most importantly, Peplin has the opportunity to bring a breakthrough product to physicians and patients with skin diseases. Actinic (solar) keratosis (AK), commonly known as sun spots, and basal cell carcinoma are serious conditions in underserved markets. The initial results of PEP005 in clinical trials indicate that we can provide an effective, safe product with significantly improved dosing. Our trials have indicated that two to three days of dosing can provide efficacy equal to or even greater than existing products. The patient benefit of such a dosing schedule, compared to weeks or months of therapy with other products, is substantial.

I look forward to working with the employees of Peplin to bring PEP005 to the market as quickly as possible. I also look forward to frequent contact with you, our shareholders. It is a very exciting time for Peplin. I enthusiastically welcome the opportunity to take the company forward, and I hope you share my excitement for the product and our future.

Cheers,

A handwritten signature in black ink that reads "Tom Wiggins". The signature is written in a cursive, slightly slanted style.

Tom Wiggins
Chairman and CEO

STRATEGY

The future for Peplin is exciting. Peplin owns global commercialisation rights to PEP005 (ingenol mebutate) Gel, a novel compound which we believe represents a significant new treatment for actinic (solar) keratosis and other serious skin conditions such as basal cell carcinoma. These conditions represent very large markets where current therapies leave much room for improvement. Peplin will continue to focus our efforts on development activities that will prove efficacy and safety in clinical trials. Assuming successful results, we plan to launch the product in our key markets, the U.S. and Australia.

New team leading the way

The appointment of new management reaffirms the company's commitment to this strategy. CEO Tom Wiggins brings both product commercialisation and pipeline management experience after his 12-year tenure leading Connetics, a dermatology enterprise that grew from a small, nine-person company with no revenues to a commercial stage company with 5 marketed products, 400 employees and \$200m in annual revenue. Prior to Connetics, he built Serono U.S. from \$1m to over \$100m in annual revenue.

While having the CEO also serve as the Chairman of the Board is unusual in Australia, it is common practice for development-stage companies in the U.S. In fact, Tom successfully served in the same role at Connetics. Tom will continue to report to the Board and Peplin's shareholders and looks forward to frequent communication with our shareholders.

In addition, Dr. Gene Bauer, as the new President and Chief Medical Officer, brings not only his extensive academic and industry dermatology expertise (see insert), but also his previous experience working with Tom to build Connetics.

About Eugene Bauer, M.D.

Gene is a Board certified US Dermatologist who served as the Dean of Stanford University School of Medicine and the Chairman of Dermatology, Stanford University Hospital and Clinics.

He is the founder and former CEO of Neosil, a development-stage dermatology company to be purchased by Peplin following shareholder approval. He is also a founder and Board emeritus of Connetics and is on the Board of Directors of publicly traded biotechnology companies Pro-talex, Inc and Medgenics, Inc.

He is the proud father of four children and grandfather to six granddaughters. In his spare time he collects classic films, although we doubt he has time to watch any of them.

RESEARCH & DEVELOPMENT

Phase III (REGION-I)

Peplin has achieved a very important milestone by starting our first Phase III

AK trial with PEP005 Gel. This Phase III trial, formerly PEP005-014 and now named REGION-I, targets non-head treatment locations, which include the trunk and extremities, at both U.S. and Australia sites. This Phase III trial is being conducted under a Special Protocol Assessment (SPA). The SPA represents the Food & Drug Administration's (FDA) agreement that the design, clinical endpoints and planned statistical analyses of Peplin's Phase III trial protocol are adequate to form a basis for approval of a new drug application. The FDA's agreement on the SPA is binding, except in limited circumstances, such as if a safety issue is identified after the testing is initiated.

Peplin expects to enrol approximately 250 patients who would apply the medication at home once a day for two consecutive days. The primary efficacy endpoint will be the complete clearance rate of AK lesions and the secondary efficacy endpoint will be the partial clearance rate of AK lesions.

President and Chief Medical Officer, Gene Bauer, M.D., said: "Initiation of our first Phase III trial moves us closer to providing an effective and convenient treatment for AK lesions in two or three days, significantly benefiting doctors and their patients".

Pending supporting data from Peplin's recently enrolled Phase IIb trial (PEP005-015) and assuming a successful End-of-Phase II meeting with the FDA, Peplin will initiate a subsequent Phase III clinical trial in patients with AK lesions on head locations in 2009.

Australian-based Chief Scientific Officer and VP Research and Development, Peter Welburn, said: "It has been very rewarding to have participated in PEP005 Gel's evolution from its roots in Australian folk lore as a topical self-treatment of various skin disorders to this novel product in Phase III development. This potential treatment could help an unsatisfied market not only in Australia, where AK is highly prevalent, but around the world. I am privileged to have worked with such an energetic and dedicated Australian and US development team to achieve this significant goal. "

Phase IIb (PEP005-015)

After an earlier than expected completion of enrolment in our Phase IIb trial on head (face and scalp) treatment

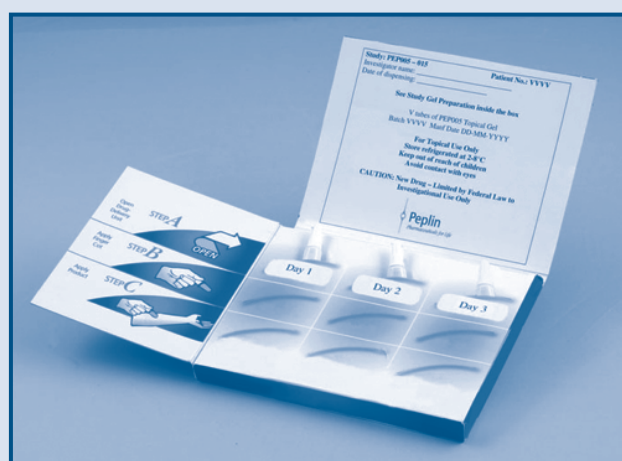


sites, we expect to report preliminary data regarding the combination of the optimum concentration (lower than non-head locations) and the preferred treatment course by the end of 2008. This will be the product we intend to take into a subsequent Phase III clinical trial, REGION-II, for treatment sites on the head.

FINANCING

Reinforcing our position as a high quality company with an exciting product candidate, Peplin has secured A\$25m in the latest round of financing, subject to shareholder approval. Despite difficult capital markets, it is heartening to validate the commitment of our current investors including, MPM, NEA, Orbis and Asia Union Investment and the introduction of a new Australian investor, GBS Ventures.

These funds, along with our Neosil acquisition (also subject to shareholder approval), which will bring approximately A\$7m, will allow us to complete our current AK Phase III development plan. Our strong cash position also allows strategic evaluation of timing and terms for the additional financings required to complete the regulatory filings and launch the product.



LOOKING FORWARD

With Peplin's first Phase III trial ongoing under an SPA, financing established and an experienced management team in place, we are poised to achieve our commercialisation plans for PEP005 Gel for AK in the US and Australia.

We encourage you to meet the Peplin team and hear the latest developments in person at our upcoming shareholder's meeting:

Date: Monday, October 6, 2008

Time: 9:00 am

Place: Marriott Hotel, 515 Queen Street, Brisbane, QLD, Australia

This is an exciting time for Peplin and we look forward to sharing our success and progress with you.

PEPLIN OVERVIEW

Vision

Peplin's vision is to deliver superior returns to shareholders through a focus on bringing to market innovative treatments which allow people to live healthier, happier and longer lives.

Our primary goal is to have a meaningful impact on skin disease and particularly skin cancers: the world's most common cancers, by delivering breakthrough solutions to patients.

Business

Peplin is a public company focused on the development and commercialisation of medical dermatology products. Its shares are listed on the Australian Securities Exchange (ASX) using the ticker PLI. The company is headquartered in Emeryville, California with operations in Brisbane, Queensland and a manufacturing facility in Southport, Queensland.

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 compound in this technology is PEP005 (ingenol mebutate), which 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 (ingenol mebutate).

Lead product

Peplin's lead compound is PEP005 (ingenol mebutate), the first in a new class of investigational agents. Peplin's lead product has shown significant promise in phase II clinical trials as a topical agent for the treatment of actinic (solar) keratosis (AK), a very common pre-cancerous lesion, and basal cell carcinoma (BCC), the most common form of skin cancer. Peplin believes the unique benefits of its lead product may include a very short course of therapy and a transient and favourable side effect profile.

Market opportunity

PEP005 (ingenol mebutate) Gel'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 outpatient setting.

In the U.S. each year there are up to 8.2 million procedures for AK. AK affects more than 58 million North Americans. The worldwide prevalence of AK is highest in Australia.

Non-melanoma skin cancers (NMSC) are the most common form of cancer worldwide. It affects more than 1.2 million people per year in the U.S. with treatment costs to the U.S. healthcare system of \$1.4 billion in 2004.

Peplin is developing PEP005 (ingenol mebutate) Gel to address the highly attractive and significant global market opportunity for non-surgical approaches to the treatment of AK and NMSC.

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