



ASX RELEASE

Start of new skin cancer clinical trial

BRISBANE, Australia, 22 May 2006: Peplin Limited (ASX:PEP) announced today that it had initiated an Australian pilot phase II clinical trial of its proprietary product PEP005 Topical for the treatment of cutaneous squamous cell carcinoma in situ (SCCIS).

Peplin Managing Director and CEO Michael Aldridge said this pilot trial would evaluate the safety and efficacy of PEP005 Topical in a form of skin cancer which is amenable to topical treatment.

“In light of the very positive results we recently reported from our phase IIa clinical trial in superficial basal cell carcinoma where two consecutive days of 0.05% PEP005 Topical gel cleared 71% of the skin tumours, we have decided to evaluate the same treatment regimen in patients with SCCIS.”

“In Peplin’s original 1999 pilot clinical trial, we saw our best results in squamous cell carcinoma. We would like to see if those results hold up with PEP005 Topical. We would expect to announce the results of this trial during the first half of 2007,” he said.

The study will be conducted by dermatologists at two sites in Queensland, and one in NSW.

ENDS

Further information:

Michael Aldridge
Managing Director & CEO
Tel: 07-3250 1200
michael.aldridge@peplin.com

The following additional information is provided in accordance with the Code of Best Practice for Reporting by Life Science Companies.

The clinical trial (PEP005-008) is a multi-centre, open-label, study to determine the safety and efficacy of 0.05% PEP005 Topical gel, applied once daily for two consecutive days to patients with SCCIS with either a 2 month or 3 month follow-up. This clinical trial will recruit 24 patients at three Australian centres. The trial will enrol male or female patients at least 18 years of age with

Pg 1/2

an SCCIS tumour selected for treatment on the trunk or extremities, excluding the hands and feet, and will exclude females of child bearing potential.

The SCCIS tumour chosen for treatment will be biopsy confirmed and a full excision of the treatment site will be carried out at the end of the study (either Day 57 or Day 85). Patients will be followed-up 1 week and 1 and 2 months and in relevant cases 3 months post treatment.

The primary objective of the trial will be the complete SCCIS clearance rate defined as the proportion of patients at the end of study (Day 57 or Day 85) with histologically confirmed clearance of the SCCIS tumour.

Secondary objectives of the clinical trial are to further evaluate the efficacy of PEP005 Topical gel in clearing SCCIS tumours and to assess the safety and tolerability of PEP005 0.05% topical gel when applied on 2 consecutive days to patients with an SCCIS tumour.

Depending on recruitment, the trial is expected to take between 6 – 12 months to complete. Peplin expects the total cost of this clinical trial to be approximately \$250,000.

ABOUT PEPLIN

Peplin is focused on the development and commercialisation of prescription human therapeutic products for the treatment of cancer. Its 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 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 topical treatment for AK and NMSC. Peplin's product development activities are supported by the Australian Federal Government under its Pharmaceuticals Partnerships Program.

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 intracavitary 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 in cancer and pain.

ABOUT SQUAMOUS CELL CARCINOMA

Squamous cell carcinoma (SCC) and basal cell carcinoma (BCC) are the most common forms of skin cancer, and collectively are referred to as non-melanoma skin cancer (NMSC). BCC is the most common form of skin cancer accounting for ~80% of all skin cancers, SCC (~16% of cases) and melanoma (~4% of cases). SCC's develop in the epidermal layer of the skin on sun exposed parts of the body and are more prevalent in older Caucasians with a history of sun exposure.

Based on a 2005 study by The Lewin Group, Inc. for The Society for Investigative Dermatology and The American Academy of Dermatology Association, there are approximately 200,000 new cases of SCC diagnosed in the US annually, of which 1,300-2,300 will result in fatality.

The worldwide prevalence of skin cancer is highest in Australia where it accounts for 80% of all new cancer cases diagnosed here each year. Together, squamous cell and basal cell carcinoma are the most costly cancers in Australia, accounting for \$232 million in treatment costs per year.