



ASX RELEASE

Enrolment complete in Australasian AK trial

BRISBANE, Australia, 4 September 2007 Peplin Limited (ASX:PEP) today announced the completion of enrolment of its Australasian phase II actinic (solar) keratosis (AK) clinical trial (PEP005-007).

PEP005-007 is a clinical trial being conducted at sites in Australia and New Zealand and designed to evaluate the safety and tolerability of PEP005 Topical for AK when applied to areas of sun-damaged skin on the face and scalp. PEP005 Topical for AK is Peplin's lead proprietary product candidate being developed for the treatment of AK. AK is a common skin condition which can develop into skin cancer.

Peplin intends to complete an interim evaluation of day 15 safety and tolerability data from this trial and expects to announce these interim results in October 2007 with final results available later in the fourth quarter of 2007.

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Details of the PEP005-007 clinical trial are set out below

The clinical trial (PEP005-007) is an open label, multi-centre, dose escalation cohort study to determine the optimal tolerated regime and safety of PEP005 Topical gel when applied to a 25 square centimetre contiguous actinic keratosis treatment area on the face or face and scalp.

Treatment with PEP005 Topical gel at escalating dosages is on either two or three consecutive days. Drug is applied to a 25 square centimetre contiguous area containing 4 to 8 typical AK lesions on the face or the face and scalp.

The primary study objective is to evaluate the optimal tolerated regime of PEP005 Topical treatment. In addition secondary objectives of lesion clearance will be evaluated.

The study has completed enrolment of 88 subjects.

ABOUT ACTINIC KERATOSIS

AK is generally considered the most common pre-cancerous skin condition. AK usually appears as small, rough, scaly areas on the face, lips, ears, back of hands, forearms, scalp or neck. If left untreated, AK lesions may progress to a form of skin cancer called squamous cell carcinoma, or SCC. The treatment of AK lesions is the most common dermatologic procedure performed in the out-patient setting.

ABOUT PEPLIN

Peplin is a development stage specialty pharmaceutical company focused on advancing and commercialising innovative medical dermatology products. Peplin is currently developing PEP005, which is a new class of compound derived from the sap of *Euphorbia peplus*, or *E. peplus*, a rapidly growing, readily-available plant commonly referred to as petty spurge or radium weed. *E. peplus* has a long history of traditional use for a variety of conditions, including the topical self-treatment of various skin disorders, including skin cancer and pre-cancerous skin lesions.

Peplin's lead product candidate is a patient-applied topical gel containing a compound the use of which Peplin has patented for the treatment of actinic keratosis, or AK. This product candidate is currently in Phase IIb clinical trials and is referred to as PEP005 Topical for AK. Peplin believes that PEP005 Topical for AK, once developed and if approved for commercialisation by the appropriate regulatory authorities, could offer patients an effective and well tolerated treatment alternative for AK with a short, two-to-three day application regimen that could be performed by the patient at home.

FORWARD LOOKING STATEMENTS

This press release contains "forward-looking statements" as defined under U.S. federal securities laws, including, but not limited to, the expected timing for Peplin's release of the clinical results from the trial referenced herein. These forward-looking statements can be identified through the use of words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "may," "will," and variations of these words or similar expressions. Forward-looking statements are based on management's current, preliminary expectations and actual results could differ materially as a result of various risks and uncertainties, including, but not limited to, delays in the completion of clinical trials resulting from ambiguous or negative interim results, unforeseen safety issues, failure to conduct the clinical trials in accordance with regulatory requirements or clinical protocols, suspension or termination of a clinical trial by the FDA or other regulatory authorities, lack of adequate funding to continue a clinical trial and other important factors disclosed from time to time in Peplin's disclosures to the ASX. Forward-looking statements speak only as of the date they were made. No undue reliance should be placed on any forward-looking statements. Such information is subject to change, and we undertake no obligation to update such statements.