ASX RELEASE

Initiation of Australasian phase II actinic keratosis trial

BRISBANE, Australia, [19 January 2007]: Peplin Limited (ASX:PEP) today announced the initiation of an Australian phase II clinical trial to evaluate the safety of PEP005 Topical, its proprietary product candidate for the treatment of actinic (solar) keratosis (AK) when applied to the face and scalp (PEP005-007).

The clinical trial, which will be conducted at multiple sites in Australia and New Zealand, is intended to complement Peplin's current phase IIb clinical trial in the US (PEP005-006) which is treating AKs on the arm, shoulder, chest, back or scalp. This trial is half way through its patient recruitment period.

If successful, Peplin intends that the combination of results from its PEP005-006 and PEP005-007 clinical trials would support the initiation of a phase III clinical trial for PEP005 Topical in actinic keratosis applied to any body site.

Details of the 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 will be on either two or three consecutive days. Drug will be 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 will be run at approximately 8 clinical centres and enrol approximately 40-60 patients.

Further information:
Michael Aldridge
Managing Director & CEO
Tel: +1-650 452 4684
michael.aldridge@peplin.com

Media:
Tim Mullen
Hill & Knowlton
Tel: 02-9286 1272 / 0408 321 312
tmullen@hillandknowlton.com.au

ABOUT PEPLIN

Peplin is focused on the development and commercialisation of medical dermatology products and in particular a novel topical product to treat skin cancer and pre-cancerous lesions. Peplin's lead compound is PEP005, the first in a new class of investigational agents. Peplin's lead product has shown significant promise in phase II clinical trials 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. 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 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 and related molecules.

ABOUT ACTINIC KERATOSIS

AK is a common skin condition characterised by rough, red, scaly patches, crusts or sores on the top layer of skin. If left untreated AKs can progress to squamous cell carcinoma, an invasive skin cancer that can be fatal. AKs usually develop on the face, lips, ears, scalp, neck, forearms and back of hands - areas that are most commonly exposed to the sun.

AKs are the most common pre-cancerous skin lesions worldwide affecting 50% of Caucasians over the age of 40 years with the average patient having 6-8 lesions. The treatment of AKs is the most common dermatologic procedure performed in the out-patient setting. Based on a 2005 study by The Lewin Group, Inc. for The Society for Investigative Dermatology and The American Academy of Dermatology Association, in the US there were 8.2 million treatments of AK in 2004. According to this study 58 million Americans have AK. The worldwide prevalence of AK is highest in Australia.

Current treatment alternatives comprise surgical techniques (primarily cryotherapy) and topical medications (e.g. 5-flourouracil, imiquimod and diclofenac). Current treatment approaches can cause scarring and hypopigmentation at the treatment site, can be inconvenient or may require long treatment duration for effect.