



ASX AND MEDIA RELEASE

PEP005's novel anti-skin cancer mechanism published

29 November 2006: Peplin Limited (ASX:PEP) and The Queensland Institute of Medical Research (QIMR), today announced that research demonstrating the novel anti-cancer mechanism of Peplin's lead compound, PEP005, has been published in the *Journal of Immunology*, the international, peer-reviewed journal of the American Association of Immunologists (J Immunol. 2006 Dec 1;177(11):8123-32).

The article illustrates that PEP005 kills tumours efficiently using two distinct and complimentary mechanisms. The first is the direct and rapid cell killing of tumour cells; the second is via activation of the bodies' immune system, which results in the identification and destruction of any residual cancer cells. These combined mechanisms deliver the rapid and long term clearance of tumours observed with PEP005 treatment.

The immune response induced by PEP005 involves an infiltration of neutrophils into the tumour site and induction of anti-cancer antibodies. The PEP005 activated neutrophils are directed by the antibodies to target and destroy any remaining tumour cells, ensuring relapse-free or long term tumour eradication.

Prof. Michael Good, Director of QIMR noted the many years of dedicated collaborative research that had culminated in these impressive findings.

"While long supposed possible, we believe this is the first occasion that researchers have demonstrated a therapeutically relevant anti-cancer role for neutrophils following treatment with a chemotherapeutic agent. We are pleased to have been involved in this ground breaking piece of research."

Peplin's Managing Director & CEO, Michael Aldridge said this publication was international scientific recognition of PEP005's unique and powerful anti-cancer activity, which Peplin is developing into a product to treat skin cancer.

"In previously reported clinical trials conducted by Peplin, PEP005 has demonstrated the ability to clear the most common forms of skin cancer in humans following just two days of treatment. The fact that this product can clear skin cancers so rapidly and elegantly may be a function of PEP005's powerful two-fold mechanism, which we have now had accepted and published in a high profile peer reviewed journal.

"We remain focused on the important goal of delivering a highly attractive product for the treatment of skin cancer and pre-cancerous lesions. The next major milestone in this program is preliminary results from Peplin's phase IIb clinical trial in 200 AK patients expected in mid 2007," he said.

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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 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 and related molecules.