



ASX & MEDIA RELEASE

Peplin Results for the Quarter Ended 30 September 2008

- Pro-forma cash balance of US\$43.6 million
- Initiation of Phase III trial, REGION-I
- Early completion of enrolment in Phase IIb trial

EMERYVILLE, California and BRISBANE, Australia, 1 December 2008: Peplin, Inc. (ASX:PLI) today announced financial results for the quarter ended 30 September 2008, reporting a US\$12.8 million cash balance. This balance, in conjunction with the October completion of a US\$24 million private placement and the acquisition of Neosil, Inc., gives Peplin a pro-forma cash position of US\$43.6 million.

Peplin believes this cash balance will be sufficient to fund phase III testing of Peplin's lead product, PEP005 (ingenol mebutate) Gel. This product is formulated as a topical gel, which is applied by the patient for the treatment of the pre-cancerous skin condition, actinic (solar) keratosis (AK) on both the head and non-head treatment areas.

Chairman and CEO Tom Wiggins described the quarter as one of significant advancements for Peplin: "Peplin has achieved important development milestones over the previous quarter, with the initiation of our first Phase III trial (REGION-I) for AK for non-head treatment applications in September and the early completion of patient enrolment in our Phase IIb trial for AK for head applications in August.

"In addition, we made management changes to support our advanced phase of development. As expected, this progress increased operating expenses compared to previous quarters, but leaves Peplin with a strong cash position to continue this development momentum through 2009."

Peplin continues on track to report results of Phase IIb AK trial during the first quarter of 2009.

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ABOUT PEPLIN

Peplin is a development stage specialty pharmaceutical company focused on advancing and commercializing innovative medical dermatology products. Peplin is currently developing PEP005 (ingenol mebutate), which is the first in a new class of compounds and which is 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 ingenol mebutate, a compound the use of which Peplin has patented for the treatment of actinic (solar) keratosis, or AK. This product candidate is currently in Phase III clinical trials (trial known as REGION-I) and is referred to as PEP005 (ingenol mebutate) Gel.

FORWARD LOOKING STATEMENTS

This press release contains "forward-looking statements" as defined under U.S. federal securities laws, including, but not limited to, Peplin's clinical development plan referred to 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, among other things, 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.