UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

(Mark One) $\sqrt{}$ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended December 31, 2008 OR TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Commission File Number 000-53410 Peplin, Inc. (Exact Name of Registrant as Specified in Its Charter) Delaware 26-0641830 (State or Other Jurisdiction of (IRS Employer Identification No.) **Incorporation or Organization**) 6475 Christie Avenue, Emeryville, California 94608 (Address of Principal Executive Offices) (Zip Code) (510) 653-9700 (Registrant's Telephone Number, Including Area Code) Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes □ No ☑ Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Large accelerated filer □ Accelerated filer □ Smaller reporting company □ (Do not check if a smaller reporting company) Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes □ No ☑

As of February 13, 2009, there were 15,141,121 shares of common stock outstanding.

PEPLIN, INC.

FORM 10-Q FOR THE QUARTER ENDED DECEMBER 31, 2008

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

Peplin, Inc. (A Development Stage Company)

Condensed Consolidated Balance Sheets

	December 31, 2008 (unaudited)	June 30, 2008
Assets:		
Current assets:		
Cash and cash equivalents	\$32,107,308	\$25,230,533
Available-for-sale securities	1,662,464	
Grant income receivable	141,351	169,776
Interest receivable	54,172	131,443
Prepaid expenses	643,665	778,923
Deferred costs	_	4,655,836
Other current assets	647,159	982,400
Total current assets	35,256,119	31,948,911
Non-current assets:		
Restricted cash	323,235	390,698
Lease deposits	197,099	176,170
Plant and equipment – net	2,061,223	2,824,111
Other non-current assets	197,252	629,206
Total non-current assets	2,778,809	4,020,185
Total assets	\$38,034,928	\$35,969,096
Liabilities and stockholders' equity:		
Current liabilities:		
Trade accounts payable	\$ 643,275	\$ 1,282,542
Accrued research and development	3,110,952	2,024,704
Accrued employee benefits and payroll taxes	817,357	779,621
Notes payable	5,392,906	5,163,171
Other accrued expenses	709,729	1,168,397
Total current liabilities	10,674,219	10,418,435
Non-current liabilities:		
Accrued employee benefits and payroll taxes	37,152	48,491
Asset retirement obligation	56,137	74,504
Notes payable	5,869,590	8,612,934
Debt completion fee payable	600,000	600,000
Total liabilities	17,237,098	19,754,364

Condensed Consolidated Balance Sheets

	December 31, 2008 (unaudited)	June 30, 2008
Stockholders' equity:		
Preferred stock, \$0.001 par value: 10,000,000 shares authorized, no shares issued and outstanding		
December 31, 2008 and June 30, 2008, respectively		_
Common stock, \$0.001 par value: 100,000,000 shares authorized, 15,141,121 and 10,341,484		
issued and outstanding at December 31, 2008 and June 30, 2008, respectively	106,374,640	80,744,288
Class B Common stock, \$0.001 par value: 1 share authorized, no shares issued and outstanding at		
December 31, 2008 and June 30, 2008, respectively		_
Additional paid-in capital	2,812,200	_
Deficit accumulated during development stage	(94,911,655)	(72,062,843)
Unrealized gain/(loss)	21,857	_
Accumulated other comprehensive income	6,500,788	7,533,287
Total stockholders' equity	20,797,830	16,214,732
Total liabilities and stockholders' equity	\$ 38,034,928	\$ 35,969,096

See accompanying notes to consolidated financial statements.

Condensed Consolidated Statements of Operations

(unaudited)

					Six Months Ended December 31,		Three Months Ended Six Months Ended (December 31, December 31, 1999		Three Months Ended Six Months Ended (December 31, December 31, 1999) t		For the period from inception (December 7, 1999) to
	2007	2008	2007	2008	December 31, 2008						
License fee revenues	\$	\$	<u> </u>	<u>\$</u>	\$ 5,770,510						
Cost of operations:											
Research and development	5,347,671	5,878,224	9,484,666	12,005,378	77,861,897						
Sales, general and administrative	2,692,624	6,602,399	4,051,848	10,555,054	30,415,459						
Total cost of operations	8,040,295	12,480,623	13,536,514	22,560,432	108,277,356						
Loss from operations	(8,040,295)	(12,480,623)	(13,536,514)	(22,560,432)	(102,506,846)						
Other income (expense):											
Interest income	436,574	134,751	709,869	408,732	4,993,762						
Interest expense	(26,995)	(437,726)	(26,995)	(1,012,114)	(2,251,469)						
Grant income	136,307	134,771	795,503	309,298	4,628,432						
Other income	17	2,942	704	7,438	246,786						
Total other income (expense)	545,903	(165,262)	1,479,081	(286,646)	7,617,511						
Net loss before income tax expense	(7,494,392)	(12,645,885)	(12,057,433)	(22,847,078)	(94,889,335)						
Income tax expense	(53,846)		(53,846)	(1,734)	(22,320)						
Net loss	\$ (7,548,238)	\$(12,645,885)	\$(12,111,279)	\$(22,848,812)	\$ (94,911,655)						
Net loss per share – basic and diluted	\$ (0.73)	\$ (0.90)	\$ (1.23)	\$ (1.88)							
Weighted average common stock outstanding used in calculation of net loss per share –											
basic and diluted	10,322,550	14,003,556	9,854,480	12,172,520							

See accompanying notes to consolidated financial statements.

Condensed Consolidated Statements of Cash Flows

(unaudited)

		nths Ended aber 31,	Six Mont		For the Period from inception (December 7, 1999) to December 31,
	2007	2008	2007	2008	2008
Operating activities:					
Net loss	\$(7,548,238)	\$(12,645,885)	\$(12,111,279)	\$(22,848,812)	\$(94,911,655)
Non-cash items:					
Depreciation and amortization	116,284	152,219	223,580	322,382	1,467,236
Amortization of borrowing costs	8,376	186,940	8,376	472,170	1,051,915
Loss on sale of plant and equipment	6,742	52,882	6,742	71,224	160,077
Stock-based compensation	579,485	934,195	963,606	851,127	5,899,407
Other non-cash items	15,982	4,015,062	(3,549)	6,422,419	6,538,296
Impairment of patents	_	_	_	_	354,589
Interest paid reclassified as financing cash					
flow	10,546	250,786	10,546	533,278	1,144,369
Changes in operating assets and liabilities:					
Receivables and other assets	83,352	96,498	(657,576)	(381,795)	(4,418,817)
Prepaid expenses	326,022	(18,863)	(2,464,146)	5,856	(1,027,816)
Lease deposits	(17,238)	_	(17,238)	_	(181,041)
Payables and other accruals	(1,856,636)	892,478	109,934	776,113	4,352,475
Accrued employee benefits	97,800	6,550	143,597	50,746	402,603
Deferred license fee income	_	_	_	_	(467,185)
Other					115,950
Net cash used in operating activities	\$(8,177,523)	\$ (6,077,138)	\$(13,787,407)	\$(13,725,292)	(79,519,597)
Investing activities:					
Proceeds from sale of plant and equipment	1,584	_	1,584	889	41,328
Purchase of plant and equipment	(176,793)	(162,053)	(440,163)	(244,744)	(3,500,984)
Cash received on acquisition of Neosil		4,389,740	` <u></u>	4,389,740	4,389,740
Payments for short term investments	_	· · ·	_	<u> </u>	(2,988,967)
Proceeds from short term investments	_	_	_	_	2,988,967
Proceeds on maturity of available-for-sale securities	_	580,381	_	580,381	580,381
Payments for intangible assets	_	_	_	_	(205,321)
Net cash used in investing activities	(175,209)	4,808,068	(438,579)	4,726,266	1,305,144

Condensed Consolidated Statements of Cash Flows (continued)

(unaudited)

	Three Mon Decemb		Six Montl		For the Period from inception (December 7, 1999) to December 31,
	2007	2008	2007	2008	2008
Financing activities:					
Proceeds from share issues	5,642,646	24,067,380	17,051,445	24,067,380	104,458,294
Proceeds from exercise of options	_	_	9,746	_	176,816
Share issue costs	(156,507)	_	(536,812)	_	(4,774,188)
Restricted deposits	(45,780)	_	(45,780)	_	(318,462)
Payments for shares repurchased	_	_	_	_	(1,199,484)
Proceeds from cancellation of shares due to					
reorganization	75,347	_	75,347	_	77,895
Payment for cancellation of shares due to					
reorganization	_	_	_	(20,020)	(77,895)
Proceeds from borrowings	15,000,000	_	15,000,000	_	15,193,968
Borrowing costs paid	(593,187)	(250,786)	(593,187)	(555,593)	(2,131,326)
Repayments on borrowings		(1,275,566)		(2,561,367)	(3,995,217)
Net cash provided by (used in) financing activities	19,922,519	22,541,028	30,960,759	20,930,400	107,410,401
Effect of exchange rate on cash and cash					
equivalents	(318,704)	(1,987,996)	1,052,712	(5,054,599)	2,911,360
Net increase (decrease) in cash and cash					
equivalents	11,251,083	19,283,962	17,787,485	6,876,775	32,107,308
Cash and cash equivalents at beginning of period	26,782,362	12,823,346	20,245,960	25,230,533	
Cash and cash equivalents at end of period	\$38,033,445	\$32,107,308	\$38,033,445	\$32,107,308	\$ 32,107,308

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements (Unaudited)

Note 1. Summary of significant accounting policies

Organization and nature of operations

Peplin, Inc. ("Peplin" or the "Company"), was formed for the purpose of reorganizing its corporate structure. On October 16, 2007, Peplin acquired all the outstanding ordinary shares of Peplin Limited pursuant to a Scheme of Arrangement. This transaction is referred to as the Reorganization. Prior to the closing of the Reorganization, Peplin had no business or operations and following the closing of the Reorganization, Peplin's business and operations consist solely of the business and operations of Peplin Limited and Peplin's other subsidiaries.

Peplin is a development stage specialty pharmaceutical company focused on advancing and commercializing innovative medical dermatology products. The Company is currently developing PEP005 (ingenol mebutate) Gel, or PEP005 Gel, which is the first in a new class of compounds that are naturally occurring and have the potential to treat cancers and pre-cancerous skin lesions. The Company's lead product candidate, for which it recently commenced a Phase III clinical trial, is a patient-applied topical gel containing PEP005, a compound the use of which the Company has patented for the treatment of actinic keratosis, or AK. The Company's other product candidate is a physician-applied topical gel for the treatment of superficial basal cell carcinoma, or superficial BCC, PEP005 (ingenol mebutate) Gel for BCC. The active compound in each product is a small molecule extracted and purified from the sap of euphorbia peplus, a rapidly growing, readily available plant.

Basis of presentation

The Company's principal activities to date have included technology development, obtaining research and funding grants, securing patents and intellectual property rights and securing finance for working capital and capital expenditures. Accordingly, these financial statements are presented as those of a development stage enterprise, as prescribed by Statement of Financial Accounting Standards ("SFAS") No. 7, Accounting and Reporting by Development Stage Enterprises.

The accompanying unaudited balance sheet as of December 31, 2008, unaudited statements of operations for the three and six month periods ended December 31, 2007 and 2008, and unaudited statements of cash flows for the three and six month periods ended December 31, 2007 and 2008 have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles, or GAAP, for complete financial statements. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation have been included.

Operating results for the three and six month periods ended December 31, 2008 are not necessarily indicative of the results that may be expected for the year ending June 30, 2009 or any other period, although the Company expects to continue to incur substantial losses for the next several years. The Company plans to continue to finance its operations through proceeds from the sale of its equity securities or the incurrence of debt. The accompanying financial statements have been prepared assuming the Company will continue as a going concern and have been presented on a basis that contemplates the realization of assets and satisfaction of liabilities in the normal course of business.

These financial statements and notes should be read in conjunction with the financial statements for the year ended June 30, 2008 included in the Company's Registration Statement on Form 10. The accompanying balance sheet as of June 30, 2008 has been derived from audited financial statements at that date.

Translation of Foreign Currencies

Effective October 1, 2008 the functional currency of the Company changed from Australian dollars to U.S. dollars. The change was made prospectively, in accordance with Statement of Financial Accounting Standards No. 52, *Foreign Currency Translation*, and was determined based on the significant changes in economic facts and circumstances of the parent entity that occurred in October 2008.

Principles of consolidation

The financial statements include the accounts of Peplin, Inc. and its wholly-owned subsidiaries, Peplin Limited, Peplin Unit Trust, Peplin Research Pty Ltd, Peplin Operations Pty Ltd, Peplin Biolipids Pty Ltd, Peplin Operations USA, Inc. and Peplin Ireland Ltd. All inter-company balances and transactions have been eliminated on consolidation.

Notes to Consolidated Financial Statements (Unaudited)

Cash, cash equivalents and Available-for-sale securities

Cash and cash equivalents comprise cash held in a variety of interest-bearing instruments, including term deposits with high credit rated Australian banks, with a maturity from purchase date of three months or less. For the purposes of the statement of cash flows, cash includes cash and cash equivalents, as defined above.

All marketable securities are classified as available-for-sale and are carried at fair value determined based on quoted market prices. The Company considers its available-for-sale portfolio as available for use in current operations. Accordingly, all investments in marketable securities are classified as short term, even though the stated maturity date may be one year or more beyond the current balance sheet date. Unrealized gains and losses on such securities are reported as a separate component of stockholders' equity. Realized gains and losses, net on sales of available-for-sale securities are included in interest income. The cost of securities sold is based on the specific-identification method.

Research and development expenditure

Research and development costs are charged as an expense when incurred. Such costs include direct salaries, stock options expense, patient recruitment fees, contract research costs, laboratory expenses and certain related administrative expenses.

Patents

Costs associated with filing, maintaining, defending and protecting patents for which no future benefit is reasonably assured are expensed as general and administrative costs when incurred.

Stock-based compensation

The Company accounts for stock-based employee compensation arrangements using the fair value based method as prescribed in accordance with the provisions of SFAS No. 123R, Accounting for Stock Based Compensation (revised 2004) ("SFAS 123R"). The Company has applied the measurement and valuation provisions of SFAS 123R for all stock options granted since the Company's inception. Stock based compensation cost for employees is measured at the grant date, based on the fair value of the award and is recognized as an expense over the period awards are expected to vest. Under the provisions of SFAS No. 123R, employee stock compensation is estimated using the Black-Scholes option-pricing model. The Black-Scholes option pricing model requires the use of certain subjective assumptions. The most significant of these assumptions are the estimates of the expected term of the award and the expected volatility of the market price of the Company's stock. The Company uses the simplified method to estimate expected life as it does not have sufficient historical exercise history.

For those options issued prior to June 30, 2006, the Company has utilized an average volatility based on Australian Securities Exchange, or ASX, listed guideline companies within the biotechnology sector as there was insufficient company trading history in order to determine an accurate volatility rate. For options issued subsequent to June 30, 2006 through to the date of the Reorganization, the Company has calculated expected volatility based on the Company's own trading activity data. Upon the Reorganization, primarily due to the underlying security changing from an Australian ordinary share to U.S. common stock, volatilities are based on NASDAQ-listed peer companies within the biotechnology sector. SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company estimates forfeitures based on historical experience. The estimation of stock awards that will ultimately vest requires judgment, and to the extent actual results differ from the Company's estimates, such amounts will be recorded as a cumulative adjustment in the period estimates are revised.

Options granted to consultants and other non-employees are accounted for in accordance with EITF consensus No. 96-18, Accounting for Equity Instruments that are issued to Other than Employees for Acquiring, or in Connection with Selling Goods or Services. Compensation costs for stock options granted to non-employees are measured at the earlier of the date at which the commitment for performance to earn the equity instrument or the date at which the counterparty's performance is complete. The fair value of stock options, as calculated using a Black-Scholes option valuation model, are expensed over the performance period and are subject to remeasurement over their vesting terms.

Notes to Consolidated Financial Statements (Unaudited)

Net loss per share

Basic and diluted net loss per share has been calculated by dividing net loss by the weighted average common stock outstanding during the periods. There are 4,062,119 stock options, non-vested shares and warrants that have not been included in the computation of net loss per share in the periods presented as their effect is anti-dilutive.

Notes payable

Notes payable are initially recognized at the value of the cash proceeds received. After initial recognition, notes payable are subsequently measured at amortized cost using the effective interest method. Fees paid on the establishment of the loan facilities ("Debt issuance costs") are capitalized as an asset and amortized over the life of the loan. Debt issuance costs payable at the completion of the facility are included as a non-current liability in the accompanying consolidated balance sheets.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported results of operations during the reporting period. Actual results could differ from those estimates. Accounting estimates have been applied to calculate accruals for employee entitlements, asset retirement obligations, impairment of assets and expenses for stock-based compensation.

Income taxes

The Company accounts for income taxes under the provisions of Statement of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes ("SFAS 109). SFAS 109 requires recognition of deferred tax assets and liabilities for the estimated future tax consequences of events attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of deferred tax assets and liabilities of a change in tax rates is recognized in the income statement in the period that includes the enactment date. Valuation allowances are established when it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company adopted the provisions of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109 ("FIN 48") on July 1, 2007. FIN 48 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. It also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

Recent accounting policies

Effective July 1, 2008, the Company adopted Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements* ("SFAS 157"), on a prospective basis for financial assets and liabilities, which requires that the Company determine the fair value of financial assets and liabilities using the fair value hierarchy established in SFAS 157. In February 2008, the FASB issued FASB Staff Position No. FAS 152-7, *Effective Date of FASB Statement No. 157*, which provides a one year deferral of the effective date of SFAS 157 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at fair value at least annually. The adoption of SFAS 157 did not have a material impact on the Company's results of operations and financial condition as of and for the six months ended December 31, 2008. See Note 8 for information and related disclosures regarding the Company's fair value measurements.

In March 2007, the FASB issued EITF Issue No. 07-03, Accounting for Nonrefundable Advance Payments for Goods or Services to be used in Future Research and Development Activities ("EITF 07-03"). EITF 07-03 clarifies that non-refundable advance payments for future research and development activities should be deferred and capitalized. It provides guidance that amounts should be recognized as an expense as the goods are delivered or the related services are performed. The issue notes if an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. EITF 07-03 is effective for fiscal years beginning after December 15, 2007. The Company determined that EITF 07-03 did not have a material impact on the Company's consolidated financial statements.

Notes to Consolidated Financial Statements (Unaudited)

In December 2007, the Securities Exchange Commission ("SEC") issued SAB No. 110, Amending and Replacing a Portion of the Staff's Views About Valuing Share-based Payments to Continue Acceptance, Under Certain Circumstances, of the Simplified Method ("SAB 110"). SAB 110 expresses the views of the staff regarding the use of a "simplified" method, as discussed in SAB No. 107, in developing an estimate of the expected term of "plain vanilla" share options in accordance with SFAS 123R. The Company will continue to use the simplified method until it has the historical data necessary to provide a reasonable estimate of expected life in accordance with SAB No. 107, as amended by SAB 110.

In June 2008, the FASB issued EITF Issue 08-3, Accounting by lessees for Maintenance Deposits under Lease Agreements. ("EITF 08-3"). EITF 08-3 clarifies that maintenance deposits should be considered a deposit when paid to the lessor if it is probable that the deposits will be refunded to the lessee. The cost of maintenance activities should be expensed or capitalized by the lessee, as appropriate, when the underlying maintenance is performed. EITF 08-3 is effective for fiscal years beginning after 15 December 2008. The Company determined that EITF 08-03 will not have a material impact on the Company's consolidated financial statements.

Note 2. Concentrations of credit risk, other risks and uncertainties

Cash and cash equivalents consist of financial instruments that potentially subject the Company to concentration of credit risk to the extent of the amount recorded on the balance sheet. The Company's cash and cash equivalents are primarily deposited with Commonwealth Bank of Australia ("CBA"), Bank of Western Australia (which was acquired by CBA in December 2008 and was a wholly-owned subsidiary of CBA at December 31, 2008) and Wells Fargo & Company. The Australian Government recently announced that it would guarantee funds currently held with Australian banks. The Guarantee is free for funds up to AU\$1 million, and an insurance premium can be paid by way of an interest rate reduction to guarantee amounts above this amount. The Company has paid the insurance premium to cover its deposits above AU\$1 million with Bank of Western Australia only. The Company is exposed to credit risk in the event of default by the banks holding the cash and cash equivalents (and the Australian Government) to the extent of the amount recorded on the balance sheets. The Company is also exposed to interest rate risk to the extent of the amount recorded on the balance sheets. The Company has not experienced any losses on its deposits of cash and cash equivalents.

In 2008, the Company completed a \$15 million, three-year loan facility with General Electric Capital Corporation ("GE") and Oxford Finance Corporation ("Oxford" and together with GE, the "Lenders"). The Company's exposure to interest rate risk on this facility is the difference between the market interest rate and the fixed interest rate on this loan of 8.50%.

The Company relies on a single third party supplier for the formulation and filling of its late stage product candidates.

Note 3. Comprehensive Loss

The Company reports comprehensive income (loss) in accordance with the provisions of SFAS No. 130, Reporting Comprehensive Income, which establishes standards for reporting comprehensive income (loss) and its components in the financial statements. The components of other comprehensive income (loss) consists of net loss and foreign currency translation adjustments. Total other comprehensive loss for the three and six months ended December 31, 2007 and 2008 was as follows:

	Three months ended		Six months ended	
	December 31, 2007	December 31, 2008	December 31, 2007	December 31, 2008
Net loss, as reported	\$(7,548,238)	\$(12,645,885)	\$(12,111,279)	\$(22,848,812)
Foreign currency translation adjustments, net of tax	(280,287)	459,212	1,113,812	(1,032,499)
Comprehensive loss	\$(7,828,525)	\$(12,186,673)	\$(10,997,467)	\$(23,881,311)

Notes to Consolidated Financial Statements (Unaudited)

Note 4. Income taxes

The Company adopted the provisions of FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109" ("FIN 48"), on July 1, 2007. FIN 48 addresses the accounting for and disclosure of uncertainty in income tax positions by prescribing a minimum recognition threshold that a tax position is required to satisfy before being recognized in the financial statements. FIN 48 also provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition.

On implementation of FIN 48 the Company reduced the deferred tax asset relating to pre-2002 consolidated tax losses in Australia by \$1,395,466, because sustainability of the losses is not considered more likely than not. Due to Australian tax legislation enacted in 2002, the application of these losses to offset a portion of future taxable income could be limited on an annual basis, and therefore do not meet the more likely than not threshold for recognition of sustainability under audit by the appropriate taxing authorities. This amount would not affect the Company's effective tax rate if recognized, because the Company's deferred tax assets are fully offset by a valuation allowance.

During the three month period ended December 31, 2008, the Company raised \$24 million in equity capital. Any capital raising undertaken by the company has the ability to limit the Company's ability to continue to carry forward its tax losses in Australia if it cannot continue to satisfy the continuity of ownership test ("COT). The Company obtained advice from its tax advisors during the period who advised the Company is anticipated to continue to satisfy the COT test.

The Company also acquired Neosil, Inc. ("Neosil"), a privately held, dermatology-focused company, in an all stock transaction. As at December 31, 2007, Neosil had federal net operating carry forward losses of approximately \$19 million, however the Company has been advised that uncertainty exists around the ability to utilize these tax losses in future periods. The Company is still determining whether it is more likely than not that these losses will be carried forward for utilization in future periods, and therefore has not currently recognized the losses as a deferred tax asset. Should these losses be recognized they would be fully offset by a valuation allowance.

Apart from the events identified above, the Company has not identified any new uncertain tax positions or adjustments to previously identified uncertain tax positions, which would result in an increase or decrease in unrecognized tax benefits. The Company has not recorded any interest expense or penalties related to unrecognized tax benefits as at December 31, 2008.

The Company's policy is to include interest and penalties related to gross unrecognized tax benefits within the provision for income tax. To the extent accrued interest and penalties do not ultimately become payable, amounts accrued will be reduced in the period that such determination is made, and reflected as a reduction of the overall income tax provision, to the extent that the interest expense had been provided through the tax provision.

The tax years remaining open to tax examination by the taxing authorities for companies within Peplin are 2000-2008 for the Australian consolidated group, 2003-2007 for the U.S. entities, and 2007 for Peplin Ireland Limited.

Note 5. Notes payable

	June 30, 	December 31, 2008
Current portion	\$ 5,163,171	\$ 5,392,906
Non-current portion	8,612,934	5,869,590
	\$13,776,105	\$11,262,496

On December 28, 2007, the Company entered into a loan agreement with the Lenders under which Peplin Limited borrowed \$15,000,000. In connection with this agreement, the Company has incurred costs related to the transaction totaling \$2,031,241, including amongst other costs, a completion fee payable when the final payment is made, as well as a grant of warrants for purchase of the Company's common stock on finalization and drawdown of the facility. The completion fee is equal to 4% of the total amounts borrowed under the credit facility. The number of warrants issued was 58,987 with an exercise price of \$15.26. The exercise price was calculated using the weighted average closing share price for the 10 days prior to grant date, and the number of shares issued was such that the fair value of the options of \$452,986 is the equivalent of approximately 6% of the loan amount drawn down. The warrants vested immediately and have a five year term, expiring on December 27, 2012.

Notes to Consolidated Financial Statements (Unaudited)

Beginning January 1, 2008, the Company was required to make monthly interest payments, in arrears, on the outstanding principal of the loan at a fixed rate of 8.5% per annum. Monthly repayments of principal began on May 1, 2008. All amounts outstanding under the loan agreement are due in full by December 28, 2010. The loan is collateralized by substantially all of the Company's assets other than, subject to certain limited exceptions, intellectual property. The Company can voluntarily prepay the loan in full, but not in part.

Borrowings are subject to certain financial covenants and restrictions on the ability of the Company and its subsidiaries (as guarantors) to pledge their intellectual property as collateral to a third party or permit a third party to restrict its ability to pledge its intellectual property. Peplin (as guarantor) has pledged 100% of the shares of the outstanding capital stock, of any class, of each of Peplin's subsidiaries. As of December 31, 2008, the Company and its subsidiaries were in compliance with all covenants. The carrying amount on the Company's balance sheet of assets that serve as collateral for borrowings totaled \$38,034,928 at December 31, 2008.

Included in current and non-current other assets at December 31, 2008 is \$737,992 related to costs incurred in connection with this loan agreement. These costs are being amortized to interest expense over the term of the loan agreement and such amortization totaled approximately \$186,940 and \$472,170 for the three and six month periods ended December 31, 2008.

Future maturities of long-term debt are as follows as of December 31, 2008:

Within one year	\$ 5,392,906
More than one year but less than two years	5,869,590
More than two years but less than three years	
Total	\$11,262,496

Note 6. Acquisition of Neosil

Effective October 16, 2008, the Company acquired Neosil, a privately held, dermatology-focused company, in an all stock transaction. The agreed purchase price of \$6.7 million was settled with a fixed number of the Company's common stock. Following the close of the transaction, Neosil became the Company's wholly-owned subsidiary. In addition to its primary asset, net cash and investments of \$6.7 million, Neosil also owns an intellectual property portfolio which comprises two early clinical stage development programs: the first, a hair growth stimulation technology with potential application in the treatment of hair loss and the second, a broad spectrum anti-microbial technology with potential application in the treatment of acne.

The Company determined the stock to be issued to the Neosil stockholders based on Neosil's estimated fair value of \$6.7 million. The number of shares was then calculated using the Company's volume weighted average closing price of the Company's CHESS Depository Interests, or CDIs, on the ASX in the 10 day period ending June 9, 2008 (being the last business day before the merger agreement was signed and announced to ASX), multiplied by twenty (being the rate of conversion of CDIs to common stock) and multiplied by the prevailing USD/AUD exchange rate as of that date. The shares were issued on October 16, 2008 at a share price of \$4.68 which was calculated as the closing price of the Company's CDIs on the ASX on October 16, multiplied by twenty (being the rate of conversion of CDIs to common stock) and multiplied by the USD/AUD exchange rate as of that date.

The acquisition of Neosil, a development stage company, was accounted for as an acquisition of assets rather than as a business combination in accordance with the criteria outlined in EITF 98-3 "Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets or of a Business." The results of operations of Neosil were included in the Company's financial statements from October 16, 2008.

Notes to Consolidated Financial Statements (Unaudited)

The fair values of the tangible net assets acquired are as follows:

	At Octol	ber 16, 2008
	(in th	ousands)
Cash	\$	4,389
Available-for –sale securities		2,243
Other receivables		112
Assumed liabilities		(100)
Total fair value of assets acquired, net of liabilities assumed	\$	6,644

At this time, the Company has not allocated any value to the intellectual property portfolio as the ability of the Company to successfully commercialize these products is highly uncertain. It is expected to take a number of years to conduct the necessary studies to file for product approval with the Food and Drug Administration, or FDA, and there is no assurance that such studies will be successful.

The Company intends to use the net cash obtained from the acquisition to continue the development of its lead product candidates PEP005 (ingenol mebutate) Gel for AK and PEP005 (ingenol mebutate) Gel for BCC. The Company believes that Neosil's proprietary technologies in hair loss and acne could enable it to expand its product pipeline in the future, although does not expect to commence further development of these programs before 2009.

Note 7. Equity

On October 16, 2008, the Company issued 819,378 shares of its common stock for the acquisition of Neosil. The number of shares issued was based on Neosil's estimated fair value of \$6.7 million using the Company's volume weighted average CDI closing price on the ASX in the 10 day trading period ended June 9, 2008, the date the merger agreement was signed.

On October 23, 2008, the Company completed a private placement with various institutional investors and issued an aggregate of 3,980,259 shares of common stock at \$6.05 per share and warrants to purchase 1,326,753 shares of common stock. Gross proceeds received were \$24.1 million. As part of the agreement, for each three shares of common stock acquired, investors received a warrant to purchase one share of common stock. The warrants have an exercise price of \$7.86 and expire on October 22, 2012.

In connection with the private placement, the Company also agreed to file a registration statement under the Securities Act of 1933, as amended, registering for resale the shares of common stock sold in the private placement, including the shares of common stock underlying the warrants. The registration statement was declared effective by the SEC on December 11, 2008. The Company may be liable for liquidated damages to holders of the common shares if the Company does not maintain the effectiveness of the registration statement. The amount of the liquidated damages is, in aggregate, 1.0% of the aggregate purchase price per month to a maximum of 12% of the aggregate purchase price paid by the investors for all common stock and warrants acquired.

Note 8. Share-Based Payments

Peplin, Inc. Incentive Award Plan

The establishment of the Peplin, Inc. 2007 Incentive Award Plan (the "Incentive Plan") was approved by special resolution of stockholders on October 1, 2007. All employees and directors of Peplin, Inc. and its subsidiaries and certain contractors are eligible to participate in the Incentive Plan upon nomination by the directors.

Notes to Consolidated Financial Statements (Unaudited)

The following table summarizes the movements in options granted to employees and contractors under the Incentive Plan outstanding as of December 31, 2008:

	Number of options
	outstanding
Total options at June 30, 2008	944,537
- granted	803,276
- forfeited/cancelled	(137,382)
- expired	(15,000)
- exercised	_
Total options at December 31, 2008	1,595,431
Options exercisable	545,751

Non vested shares

During the six month period ended December 31, 2008, the Company granted 225,000 non-vested shares. Of those granted, 56,250 non-vested shares vest on each of June 30, 2009 and 2010, with the remaining shares vesting on either June 30, 2011 or on the first day after twenty consecutive days during which the volume-weighted average price of the Company's common stock on each day is equal to or greater than \$15.00 per share. Vesting is subject to continued employment with the Company. The fair value of the non-vested shares of \$6.24 was determined using the closing market price of the company's CDIs multiplied by 20, converted at the US dollar exchange rate published by the Reserve Bank of Australia on grant date.

Consulting agreements

During the six month period ended December 31, 2008, two officers of the Company resigned from the Company. Upon resignation both employees entered into consulting agreements with the Company. As the status of both employees changed from employee to non-employee, the accounting treatment of options held by these former officers will now be in accordance with Issue 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services" ("Issue 96-18"), rather than SFAS 123R.

One agreement provided for consulting services to May 15, 2009 (or earlier should the officer, or under certain circumstances, the Company, choose to terminate the agreement) and became effective on August 15, 2008. At the date of resignation, 229,675 options were held by this officer and were treated as follows:

- 85,000 vested options issued under the original employment agreement are exercisable for a period of 270 days from the resignation, being May 12, 2009;
- 15,000 unvested options issued under the original employment agreement were forfeited on resignation;
- 39,950 vested options issued under the Incentive Plan are exercisable through the consulting period;
- 33,334 vested options issued under the Incentive Plan were cancelled on resignation;
- 16,666 unvested options issued under the Incentive Plan were forfeited on resignation; and
- 39,725 options issued under the Incentive Plan will continue to vest in accordance with the original option terms. All unvested options will be forfeited at the completion of the consultancy services.

The second agreement provided for consulting services to June 15, 2009 (or earlier should the officer, or under certain circumstances, the Company, choose to terminate the agreement) and became effective on September 2, 2008. At the date of resignation, 108,469 options were held by this officer which were treated as follows:

- 68,083 vested options are exercisable throughout the consulting period; and
- 40,386 unvested options were forfeited.

Notes to Consolidated Financial Statements (Unaudited)

Stock based compensation

The fair value of all options granted to employees, directors and contractors were computed at the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

		Three Months Ended December 31,		ns Ended oer 31,
	2007	2008	2007	2008
Risk Free Interest Rate	4.18%	3.18%	4.18%	3.18%
Expected Dividend Yield	0%	0%	0%	0%
Expected Term	2.01 years	6.05 years	2.01 years	6.05 years
Expected Volatility	61%	62%	61%	62%
Expected forfeiture	1.35%	11.76%	1.35%	10.71%

The Black-Scholes option pricing model was developed for use in estimating the fair value of options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. The expected term of the options used in the estimation of the fair value of non-traded options has been determined based on the mid point between the vesting date and the end of the contractual term. For those options issued prior to June 30, 2006, we have utilized an average volatility based on guideline companies within the biotechnology sector as there was insufficient Company trading history to determine an accurate volatility rate. For options issued subsequent to June 30, 2006, through to the date of the Reorganization, the Company calculated expected volatility based on the Company's own trading activity data. Upon the Reorganization, primarily due to the Company's underlying security changing from an Australian ordinary share to U.S. common stock, the Company began to use U.S. risk-free interest rates and volatilities based on NASDAQ-listed peer companies within the biotechnology sector.

The stock based compensation expense has been recorded in the following captions of the consolidated statements of operations:

	Three Months Ended December 31,		Six Months Ended December 31,	
	2007	2008	2007	2008
Employee share options				
Research and development	\$396,859	\$212,124	\$619,599	\$414,152
Sales, general and administrative	182,626	499,188	344,007	214,092
Non-vested shares				
Sales, general and administrative	_	222,883	_	222,883
Total	\$579,485	\$934,195	\$963,606	\$851,127

During the three and six months ended December 31, 2008, respectively, there was a total of \$93,035 and \$479,085 reversed out of sales, general and administrative expenses, comprised of \$30,254 and \$301,359 of compensation expenses related to forfeited options and \$62,781 and \$177,726 related to the cumulative compensation expense catch-up resulting from management's revised option forfeiture estimation.

Note 9. Segment disclosures

The Company operates in one business segment. Its activities comprise of research and development of the therapeutic products for the treatment of cancers and other diseases, from which it derives no customer revenue. The Company operates in two geographical areas being Australia and the United States, with total assets as follows:

	June 30, 2008	December 31, 2008
	2008	2008
Australia	\$33,852,068	\$29,666,154
United States	2,117,028	8,368,774
Total	\$35,969,096	\$38,034,928

Notes to Consolidated Financial Statements (Unaudited)

Note 10. Fair value of financial instruments

SFAS 157 defines "fair value" as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, or an exit price. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on several factors, including the instruments' complexity.

Beginning July 1, 2008, assets and liabilities recorded at fair value are categorized based upon the level of judgment associated with inputs used to measure their value. SFAS 157 defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

- Level 1 Quoted prices in active markets for identical assets or liabilities.
- Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market date for substantially the full term of the assets or liabilities.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

In accordance with SFAS 157, the following table represents the Company's fair value hierarchy for its financial assets and liabilities (cash and short-term deposits) measured at fair value on a recurring basis as of December 31, 2008:

		Fair Value Measurements at Reporting Date Using		
Description	December 31, 2008	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents				
Cash	\$27,093,178	\$27,093,178	\$ —	\$ —
Money market funds	\$ 5,014,129	\$ —	\$5,014,129	\$ —
Available-for-sale securities:				
Mortgage backed securities	\$ 264,094	\$ —	\$ 264,094	\$ —
Corporate and foreign bonds	\$ 1,398,371	\$	\$1,398,371	\$ —
Total	\$33,769,772	\$27,093,178	\$6,676,594	\$ —

PEPLIN, INC.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to assist in understanding and assessing the trends and significant changes in our results of operations and financial condition. Historical results may not indicate future performance. This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," or "continue," and similar expressions or variations. Our forward-looking statements, which reflect our current views about future events, are based on assumptions and are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those contemplated by these statements. Factors that may cause differences between actual results and those contemplated by forward-looking statements include, but are not limited to, those discussed in Part II, Item 1A, "Risk Factors," herein and in the Registration Statement on Form 10 filed with the Securities Exchange Commission which became effective on October 30, 2008. As used in this Management's Discussion and Analysis of Financial Condition and Results of Operations, the words, "we" "our" and "us" refer to Peplin, Inc. and its consolidated subsidiaries. This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our consolidated financial statements and related notes included in this report.

Overview

We are a development stage specialty pharmaceutical company focused on advancing and commercializing innovative medical dermatology products. We are currently developing PEP005 (ingenol mebutate) Gel, or PEP005 Gel, which is the first in a new class of compounds and is derived from *Euphorbia peplus*, or *E. peplus*, a rapidly growing, readily-available plant, commonly referred to as petty spurge or radium weed. The sap of *E. peplus* has a long history of traditional use for a variety of conditions, including the topical self-treatment of various skin disorders, such as skin cancer and pre-cancerous skin lesions. Our lead product candidate, for which we recently commenced a Phase III clinical trial, is a patient-applied topical gel containing PEP005, a compound the use of which we have patented for the treatment of actinic keratosis, or AK. AK is generally considered the most common pre-cancerous skin condition and typically appears on sun-exposed areas of the skin as small, rough, scaly patches. AK lesions may progress to a form of skin cancer called squamous cell carcinoma, or SCC. We believe that our lead product candidate, PEP005 Gel for AK, once developed and, if approved for commercialization 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.

We are also developing a product candidate containing PEP005 Gel for the treatment of superficial basal cell carcinoma, or superficial BCC. This product candidate is currently in Phase IIa clinical trials and is referred to as PEP005 Gel for BCC. BCC is the most commonly occurring cancerous skin tumor and can present itself in two forms, nodular BCC, which appears as a shiny bump or nodule that may be confused with a mole, and superficial BCC, which has a slightly raised, ulcerated or crusted surface. Our development of PEP005 Gel for BCC is at an earlier stage than that of PEP005 Gel for AK. However, we believe that this product candidate, once developed and, if approved for commercialization by the appropriate regulatory authorities, could offer patients an effective and well-tolerated treatment alternative for superficial BCC with a short, one or two day application regimen.

Prior to filing a new drug application, or NDA, for PEP005 Gel for AK, we will need to complete a series of clinical trials in two general anatomical areas: head, which comprises areas on the face or scalp, and non-head, which primarily comprises areas on the back of the hand, arm, shoulder and back. We expect this program will require at least two pivotal Phase III clinical trials comprising one Phase III clinical trial for non-head applications and one Phase III clinical trial for head applications, in each case together with supportive safety and other studies. We have completed our Phase IIb clinical trial of PEP005 for non-head locations and submitted the results of the trial to the FDA and, upon review, the FDA stated that the trial was an adequate dose ranging trial of PEP005 Gel for AK in non-head treatment locations. Subsequently, we submitted a request for a Special Protocol Assessment, or SPA, with the FDA for our initial Phase III clinical trial for non-head applications. In the SPA process, the FDA reviews the design, size and planned analysis of a proposed Phase III clinical trial and provides comments regarding the trial's adequacy to form a basis for marketing approval with respect to effectiveness, should the trial achieve its objectives. The FDA has indicated its agreement with the design, clinical endpoints and planned statistical analyses of our proposed Phase III clinical trial. The FDA's agreement on the SPA is binding on it, except in limited circumstances, such as if a substantial scientific issue essential to determining the safety and effectiveness is identified after the trial is initiated. We have called this Phase III clinical trial for non-head applications our REGION I clinical trial. We commenced the REGION I clinical trial in September 2008. We have completed enrollment in this trial, treating 250 patients in Australia and the U.S., and we are now conducting follow-up visits to measure the effectiveness of the treatment.

For head applications of PEP005 Gel for AK, we completed our Phase IIb dose ranging clinical trial in January 2009. This Phase IIb clinical trial is intended to support the design of our subsequent Phase III clinical trial for head applications, which we plan to initiate in 2009 following our end of Phase II meeting with the FDA. We expect to file a single NDA for applications to treat AK on both head and non-head treatment locations with the FDA by mid-2010, assuming a successful end-of-Phase II meeting with the FDA and the successful completion of our Phase III clinical program.

We operate our manufacturing facility for the drying, milling, extraction and purification of PEP005 in Southport, Queensland, Australia. Other activities relating to manufacturing are undertaken by various outside contractors. Currently, clinical batches are manufactured, packaged and labeled by a single contractor based in the United Kingdom. The clinical supplies are then shipped to locations designated by us or our clinical research organization for use in trials. We believe we will need to increase our manufacturing capacity if any of our product candidates are approved for commercialization.

To date we have not generated any revenue from the sale of our products and have funded our operations primarily through the sale of equity securities, the entrance by Peplin Limited, our wholly-owned subsidiary, into a \$15 million loan agreement and government grants. We have experienced net losses in each year since our inception. As of December 31, 2008, we had an accumulated deficit of \$94.9 million. We expect our net losses to continue and to increase as the continued development of our PEP005 product candidates will require significant additional expenditures for a variety of activities, including continued preclinical studies, clinical trials, research and development, manufacturing development and regulatory approvals. We do not expect to generate revenue from the sale of our products until one or more of our product candidates is approved for sale by the FDA, which we do not expect to occur prior to 2011. We cannot assure you that any of our product candidates will obtain FDA approval in a timely manner, or at all. Our product candidates are based on an untested new chemical entity with a novel mode of action. We may not obtain regulatory approval for many reasons, including, among others:

- our inability to complete our ongoing and planned clinical trials in a timely manner;
- the results of our clinical trials may not effectively demonstrate the safety and efficacy of our product candidates;
- the data from our clinical trials may not support an NDA;
- the FDA may disagree with the results of our clinical trials; or
- the FDA may change its approval policies and procedures.

If we are unable to obtain regulatory approval of any of our product candidates, we will be unable to generate revenue and may never become profitable.

We were formed for the purpose of reorganizing our corporate structure. Peplin Limited, formerly known as Peplin Biotech Ltd., was formed in 1999 as an Australian company. On October 16, 2007, we acquired all the outstanding shares of Peplin Limited pursuant to a Scheme of Arrangement. We refer to this transaction as the Reorganization. Following the Reorganization, Peplin Limited became our wholly-owned subsidiary and our business and operations consisted solely of the business and operations of Peplin Limited and our other subsidiaries.

Fiscal Year

We report results of our operations on a fiscal year basis ending on June 30 of each year. For presentation purposes, we refer in this Form 10-Q and the accompanying financial information to a fiscal year end for each year of June 30.

Critical Accounting Estimates and Judgments

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as reported revenues and expenses during the reporting periods. On an ongoing basis, we evaluate our estimates and judgments. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making assumptions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following accounting policies are critical to the process of making significant estimates and judgments in preparation of our financial statements.

Revenue Recognition

We apply the revenue recognition criteria outlined in Staff Accounting Bulletin, or SAB, No. 104, *Revenue Recognition*, and Emerging Issues Task Force, or EITF, Issue 00-21, *Revenue Arrangements with Multiple Deliverables*, to any license fee revenue. In applying these revenue recognition criteria, we consider a variety of factors in determining the appropriate method of revenue recognition under our revenue arrangements, such as whether the elements are separable, whether there are determinable fair values and whether there is a unique earnings process associated with each element of a contract.

Government Grant Income

Government grants, which support our research efforts in specific projects, generally provide for reimbursement of approved costs incurred. Grant receipts are recognized by us as other income when research and development expenditures to which the particular grant relates have been incurred.

In 2006, we were awarded a research grant under the Australian Government's Pharmaceuticals Partnerships Program, or P3 program. Under the terms of the P3 program, we received grant proceeds in arrears. Where qualifying expenses have been incurred and grant proceeds not yet received, a receivable for grant income is recorded in the balance sheet. There are no unfulfilled conditions or contingencies attaching to this grant nor are there any repayment provisions.

Stock-Based Compensation

We account for stock-based employee compensation arrangements using the fair value based method as prescribed in accordance with the provisions of Statement of Financial Accounting Standards, or Statement of Financial Accounting Standards, or SFAS, No. 123R, Accounting for Stock Based Compensation (revised 2004), or SFAS 123R. We have recently adopted SFAS 123R and applied the measurement and valuation provisions to all stock options granted since our inception. Stock based compensation cost for employees is measured at the grant date, based on the fair value of the award and is recognized as an expense over the period awards are expected to vest. The estimation of stock awards that will ultimately vest requires judgment, and to the extent actual results differ from our estimates, such amounts will be recorded as a cumulative adjustment in the period estimates are revised.

Options granted to consultants and other non-employees are accounted for in accordance with EITF Issue No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Connection with Selling, Goods or Services*, or Issue 96-18. Compensation cost for stock options granted to non-employees is measured at the earlier of the date at which the commitment for performance by the consultant or non-employee to earn the equity instrument is reached or the date at which the consultant's or non-employee's performance is complete. The fair value of stock options as calculated using a Black-Scholes valuation model and are expensed over the performance period and are subject to remeasurement over their vesting terms.

The Black-Scholes option pricing model was developed for use in estimating the fair value of options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. The expected term of the options used in the estimation of the fair value of non-traded options has been determined based on the mid point between the vesting date and the end of the contractual term. For those options issued prior to June 30, 2006, we have utilized an average volatility based on ASX-listed guideline companies within the biotechnology sector as there was insufficient company trading history to determine an accurate volatility rate. For options issued subsequent to June 30, 2006, through to the date of the Reorganization, we calculated expected volatility based on our own trading activity data. Upon the Reorganization, primarily due to our underlying security changing from an Australian ordinary share to U.S. common stock, we began to use U.S. risk-free interest rates and volatilities based on NASDAQ-listed peer companies within the biotechnology sector.

Income Tax

We account for income taxes under the provisions of SFAS No. 109, *Accounting for Income Taxes*, or SFAS No. 109. SFAS No. 109 requires recognition of deferred tax assets and liabilities for the estimated future tax consequences of events attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as operating loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of deferred tax assets and liabilities of a change in tax rates is recognized in the income statement in the period that it includes the enactment date. Valuation allowances are established when it is more likely than not that some or all of the deferred tax assets will be not realized.

We adopted the provisions of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109, or* FIN 48, on July 1, 2007. FIN 48 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. It also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

Financial Overview

Revenue

From our inception to December 31, 2008, our revenue consisted of \$5.8 million in license fees received under a license and collaboration agreement with Allergan, Inc., or Allergan, entered into in November 2002. License fees included a non-refundable upfront payment, quarterly installment payments and milestone payments based on achieving certain predefined milestones. Upon receipt, all such payments, including the milestone payments which we deemed to be inseparable from the overall license fee, were recorded as deferred license fee income and were recognized as revenue ratably over the term of the license. The agreement was cancelled in October 2004 and Allergan paid a fee of \$1.3 million, which was recognized as revenue in the year ended June 30, 2005. At that time, all amounts previously recorded as deferred income that had not been recognized were recognized as revenue. We have earned no revenue since the year ended June 30, 2005.

Research and Development Expenses

Our research and development expenses primarily consist of expenses related to the development of products containing PEP005, including preclinical studies, toxicology, clinical trials, regulatory expenses and manufacturing materials used in clinical trials and other trials. Our expenses to operate our clinical trials include trial design, clinical site reimbursement, data management and associated travel expenses. Our research and development expenses also include fees for design services, contractors and materials, expenses associated with clinical trial materials and employee compensation, including stock-based compensation.

Sales, General and Administrative

Our sales, general and administrative expenses primarily consist of compensation for our executive, commercial, financial, and administrative personnel, including stock-based compensation, as well as compensation for our board of directors. Other general and administrative expenses include facility costs not otherwise included in research and development expenses, and professional fees for legal, consulting and accounting services.

Other Income (Expense)

Total other income consists of grants received from the Australian government under a number of grant arrangements, including its R&D START program and its Pharmaceuticals Partnerships Program, or P3 program. These grants support our research efforts in specific projects, and generally provide for reimbursement of approved costs incurred. Grant receipts are recognized by us as other income when research and development expenditures to which the particular grant relates have been incurred.

Our most recent R&D START grant was completed in August 2004. Total income to-date recognized under the R&D START grants was \$2.1 million. The amount recognized under the P3 program from inception to December 31, 2008 was \$2.3 million. Total other income also consists of interest income earned on our cash and cash equivalents and short-term deposits, as well as interest expense incurred on our loan with the Lenders.

Income Taxes

Since inception, we have incurred operating losses and, accordingly, have not recorded a provision or benefit for income taxes for any of the periods presented.

As of June 30, 2008, we had net operating loss carry-forwards of \$31.1 million. The majority of these net operating loss and tax credit carryforwards were incurred in Australia and will carry forward subject to the satisfaction of either a continuity of ownership or business test as applied in that country. Utilization of net operating loss carryforwards may be subject to annual limitation due to Australian Tax Office requirements that are applicable if we experience a cumulative "ownership change." Due to our lack of earnings history, realization of these deferred tax assets is not more likely than not, therefore the deferred tax assets have been fully offset by a valuation allowance.

Results of Operations

Comparison of Three Months Ended December 31, 2007 and 2008

Revenue. We recorded no revenue for the three months ended December 31, 2007 and 2008.

Research and Development Expenses. Research and development expenses increased 10% from \$5.3 million in the three months ended December 31, 2007 to \$5.9 million in the three months ended December 31, 2008. The increase in the three months ended December 31, 2008 was due primarily to increases in our clinical trial costs. We expect research and development expenses to continue to increase as we devote substantial resources to research and development to support the continued development of our product candidates, including our Phase III clinical trial program for PEP005 Gel for AK.

Research and development expenses represented 67% of total operating expenses for the three months ended December 31, 2007 and 47% for the three months ended December 31, 2008.

Sales, General and Administrative Expenses. Sales, general and administrative expenses increased 145% from \$2.7 million in the three months ended December 31, 2007 to \$6.6 million in the three months ended December 31, 2008. This was predominantly due to foreign exchange movements on remeasurement of our loan with the Lenders into the Australian dollar functional currency of Peplin Limited, our wholly-owned Australian subsidiary. We expect sales, general and administrative costs to increase in future as we begin to expand the commercial, sales and marketing functions of the company.

Other Income (Expense). We had total other income of \$0.5 million for the three months ended December 31, 2007 and total other expense of \$(0.2) million for the three months ended December 31, 2008. We received \$0.1 million related to government grants during each of the three months ended December 31, 2007 and 2008. We also incurred \$0.4 million in interest expense during the three months ended December 31, 2008, on our loan from the Lenders, which did not exist at December 31, 2007. We received interest income of \$0.1 million during the three months ended December 31, 2008.

Comparison of Six Months Ended December 31, 2007 and 2008

Revenue. We recorded no revenue for the six months ended December 31, 2007 and 2008.

Research and Development Expenses. Research and development expenses increased 26% from \$9.5 million in the six months ended December 31, 2007 to \$12.0 million in the six months ended December 31, 2008. The increase in the six months ended December 31, 2008 was due primarily to increases in our clinical trial costs. We expect research and development expenses to continue to increase as we devote substantial resources to research and development to support the continued development of our product candidates, including our Phase III clinical trial program for PEP005 Gel for AK.

Research and development expenses represented 70% of total operating expenses for the six months ended December 31, 2007 and 53% for the six months ended December 31, 2008.

Sales, General and Administrative Expenses. Sales, general and administrative expenses increased 160% from \$4.1 million in the six months ended December 31, 2007 to \$10.6 million in the six months ended December 31, 2008. This was predominantly due to foreign exchange movements on remeasurement of our loan with the Lenders. We expect sales, general and administrative costs to increase in future as we begin to expand the commercial, sales and marketing functions of the company.

Other Income (Expense). We had total other income of \$1.5 million for the six months ended December 31, 2007 and total other expense of (\$0.3) million for the six months ended December 31, 2008. We received \$0.8 million and \$0.3 million related to government grants during the six months ended December 31, 2007 and 2008, respectively. We also incurred \$1.0 million in interest expense and received \$0.4 million in interest income, during the six months ended December 31, 2008.

Liquidity and Capital Resources

Since inception through December 31, 2008, we have financed our operations primarily through placements of equity securities, receiving aggregate net proceeds from such placements totaling \$106.3 million, the entrance by Peplin Limited, our wholly-owned subsidiary, into a \$15 million loan agreement, license revenue totaling \$5.8 million and Australian government grants totaling \$4.6 million. As of December 31, 2008, we had \$32.1 million in cash and cash equivalents. Our cash and cash equivalents are held in a variety of interest-bearing instruments, including term deposits with Australian banks with maturities from purchase date of three months or less. Cash in excess of immediate requirements is invested with regard to liquidity and capital preservation.

Net cash used in operating activities was \$13.8 million and \$13.7 million in the six months ended December 31, 2007 and 2008, respectively. The net cash used in each of these periods primarily reflects net losses for these periods, offset in part by depreciation, non-cash stock-based compensation and non-cash changes in operating assets and liabilities.

Net cash provided by (used in) investing activities was \$(0.4) million and \$4.7 million in the six months ended December 31, 2007 and 2008, respectively. Investing activities consist primarily of the acquisition of Neosil and plant and equipment purchases. We expect to continue to make investments in the purchase of property and equipment to support our expanding operations.

Net cash provided by financing activities was \$31.0 million in the six months ended December 31, 2007 and \$20.9 million in the six months ended December 31, 2008. Cash provided by financing activities consist primarily of proceeds from the sale of our shares, and proceeds from borrowings. For the six months ended December 31, 2008 the primary cost of financing activities was the repayment of borrowings under the \$15 million loan agreement entered into by Peplin Limited, our wholly-owned subsidiary.

On December 28, 2007, Peplin Limited, our wholly-owned subsidiary, entered into a \$15.0 million loan agreement with the Lenders. As of that date, we have paid non-refundable fees and interest totaling \$337,500. The loan agreement is guaranteed by us and each of our subsidiaries. The loan agreement fully amortizes over a series of thirty-six monthly payments. Under the loan agreement, we are required to make three monthly payments of interest only, followed by thirty-three monthly payments of principal and interest. Interest accrues on amounts outstanding under the agreement at a fixed per annum rate of 8.50%. The loan is secured by a first-priority security interest in all of our assets (other than intellectual property), including the shares of outstanding capital stock, or other equity interests, of each of our subsidiaries. In addition, we are prohibited from incurring any liens, claims or encumbrances of any kind on our intellectual property, subject to certain exceptions contained in the loan agreement. Amounts prepaid under the loan agreement are not subject to a prepayment fee. In addition, upon repayment of the amounts borrowed for any reason, we will be required to pay a completion fee equal to \$600,000. Under the terms of the agreement, we are subject to operational covenants, including limitations on our ability to incur liens or additional debt, make dispositions, pay dividends, redeem our stock, make certain investments and engage in certain merger, consolidation or asset sale transactions and transactions with affiliates, among other restrictions. As of December 31, 2008, we were in compliance with all covenants. In addition, in consideration for this financing, we granted GE and Oxford warrants to purchase 39,325 shares and 19,662 shares, respectively, of our common stock at an exercise price of \$15.26 per share. These warrants were immediately exercisable and will expire on December 28, 2012.

Effective October 16, 2008, we acquired 100% of Neosil, Inc., or Neosil, a privately held, dermatology-focused company in an all stock transaction. The agreed purchase price of \$6.7 million, which was based on the estimated cash balance of Neosil at the closing, was paid with 819,378 shares of our common stock.

On October 23, 2008, we issued 3,980,259 shares of common stock at \$6.05, and warrants to purchase 1,326,753 shares of common stock, to raise \$24,067,380 cash for each three shares of common stock acquired, investors received a warrant to purchase one share of common stock. We incurred total transaction costs of \$3,039,782.

We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated cash needs for working capital and capital expenditures for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available financial resources sooner than we currently expect. Our forecast of the period of time that our financial resources will be adequate to support operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed in Part II, Item 1A, "Risk Factors," herein and in Item 1A of the Registration Statement on Form 10 filed with the Securities and Exchange Commission which became effective on October 30, 2008. In light of the numerous risks and uncertainties associated with the development and commercialization of our product candidates and the extent to which we enter into collaborations with third parties to participate in their development and commercialization, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and commercialism of our products. Our future funding requirements will depend on many factors, including:

• the scope, results, rate of progress, timing and costs of preclinical studies and clinical trials and other development activities;

- the costs and timing of seeking and obtaining regulatory approvals;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs of developing our sales and marketing capabilities and establishing distribution capabilities;
- the costs of securing coverage, payment and reimbursement of our product candidates, if any of our product candidates receive regulatory approval;
- the effects of competing clinical, technological and market developments; and
- the terms, timing and cash requirements of any future acquisitions, collaborative arrangements, licensing of product candidates or investing in businesses, product candidates and technologies.

We may need to raise additional funds to support our operations, and such funding may not be available to us on acceptable terms, or at all. If we are unable to raise additional funds when needed, we may not be able to continue development of our product candidates or we could be required to delay, scale back or eliminate some or all of our development programs and other operations. We may seek to raise additional funds through public or private equity or debt financing, strategic partnerships or other arrangements. Any additional equity financing may be dilutive to stockholders and debt financing, if available, may involve restrictive covenants similar to, or more onerous than, the covenants contained in our loan agreement. If we raise funds through collaborative or licensing arrangements, we may be required to relinquish, on terms that are not favorable to us, rights to some of our technologies or product candidates that we would otherwise seek to develop or commercialize ourselves. Our failure to raise capital when needed may harm our business and operating results.

Contractual Obligations and Commitments

Our future contractual obligations at June 30, 2008 were as follows:

	Payments Due By Period				
Contractual Obligations	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousand	IS)	
Long-term debt obligations (1)	\$13,776	\$ 5,163	\$ 8,61	3 \$—	\$ —
Research and development expenditure (2)	8,692	7,982	71	0 —	_
Operating lease obligations	1,830	581	1,22	22 27	
Interest obligations on long-term debt	1,564	973	59	1	
General and administration	169	169	_		
Total	\$26,031	\$14,868	\$ 11,13	\$ 27	\$ —

⁽¹⁾ In December 2007, Peplin Limited, our wholly-owned subsidiary, entered into a \$15 million loan agreement with the Lenders.

As of December 31, 2008, there were no material changes to our contractual obligations set forth above.

On October 7, 2004, we entered into a termination and settlement agreement with Allergan in order to terminate the license and collaboration agreement entered into with Allergan in November 2002. Pursuant to the terms of the termination agreement, Allergan paid us \$1.3 million in satisfaction of its outstanding obligations under the license and collaboration agreement and retained no residual rights to PEP005. Furthermore, should we relicense PEP005 in a topical formulation to another party, we agree to pay Allergan 25% of any license or similar fees we receive prior to the commercialization of such PEP005 product, subject to a cap of \$3.0 million, and 25% of royalties and similar revenue we receive following the commercialization of the product subject to a cap of \$4.0 million; however, the combination of pre-commercialization license fees and post-commercialization royalties will not exceed \$4.0 million. Alternatively, if we or our affiliates sell PEP005 in a topical formulation for specified indications in the United States, Canada, Mexico and certain other countries, we will pay Allergan up to \$4.0 million by way of a 10% royalty on net sales. In no event will our total payments to Allergan under the termination agreement exceed \$4.0 million.

⁽²⁾ Represents commitments under clinical trial agreements, preclinical research studies and development obligations.

Off Balance Sheet Arrangements

We have not engaged in off balance sheet arrangements, including the use of structured finance, special purpose entities or variable interest entities.

Item 3. Quantitative and Qualitative Disclosure About Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our exposure to market risk is confined to our cash and cash equivalents and our available-for-sale securities. We do not hold or issue financial instruments for trading purposes.

Our cash and cash equivalents have maturities of less than three months. The primary objective of our investment activities is to preserve our capital to fund operations. We also seek to maximize income from our investments without assuming significant risk. To achieve our objectives, we maintain a portfolio of cash equivalents. As of December 31, 2008, we had cash and cash equivalents of \$32.1 million. Because of the short-term maturities of our cash equivalents, we do not believe that an increase in market rates would have any material negative impact on the realized value of our cash equivalents. We do not expect to enter into investments for trading or speculative purposes.

Our available-for-sale securities have maturities of three months or less with the exception of one investment with a maturity date of March 2010.

Currently, we are exposed to foreign exchange risk, particularly with the U.S. dollar, Australian dollar and the British pound, as a result of certain research and development activities that are undertaken internationally and our U.S. denominated debt under our loan agreement. It is our policy to minimize the use of financial derivatives and achieve risk mitigation through natural hedges. These natural hedges include the maintenance of U.S. dollar and Australian dollar bank accounts and deposits to primarily facilitate the payment of research and development activities. We do not expect to enter into foreign currency exchange contracts for trading or speculative purposes.

Effective October 1, 2008, we changed the functional currency to U.S. dollars. The change was made prospectively, and was determined based on the significant changes in economic facts and circumstances that occurred recently, in accordance with SFAS No. 52, Foreign Currency Translation.

Because our historical functional currency was the Australian dollar, our historical reported financial results were subject to fluctuation resulting from changes in the Australian dollar to U.S. dollar exchange rate.

Item 4. Controls and Procedures

Not applicable. See Item 4T below.

Item 4T. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, including the Chief Executive Officer and Chief Financial Officer, have conducted an evaluation of the effectiveness of disclosure controls and procedures as of the end of the period covered by this report pursuant to Rule 13a-15(b) of the Securities Exchange Act of 1934, as amended, or Exchange Act.

On October 31, 2008, we filed certain financial information with the Australian Securities Exchange, or the ASX, as required by the listing standards of the ASX. We inadvertently failed to file a Current Report on Form 8-K containing that information in a timely manner. Based solely on that occurrence, the Chief Executive Officer and Chief Financial Officer have concluded that the disclosure controls and procedures as of the period covered by this report were not effective to ensure that information required to be disclosed by the Company in current reports filed with the Securities and Exchange Commission is reported within the required time periods. We are implementing additional disclosure controls and procedures that are designed to address the timely filings of current reports in future periods.

Changes in Internal Control Over Financial Reporting

In connection with our September 30, 2008 quarterly financial statement filing, we, together with our independent registered public accounting firm, identified a material weakness in our internal control over our period end close process and specifically the accrual processes. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis by the company's internal controls.

Our management and independent registered public accounting firm did not perform an evaluation of our internal control over financial reporting during such periods in accordance with the provisions of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. Had we and our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional control deficiencies may have been identified by management or our independent registered public accounting firm, and those control deficiencies could have also represented one or more material weaknesses.

The material weakness related to our period end close process and specifically the accrual process, and resulted in the recording of a material adjustment for the three month period ended September 30, 2008. We are currently taking steps to remediate the material weakness including engaging our independent registered public accounting firm to review and test our current internal controls and provide recommendations for improvements to our current internal controls processes, providing additional training to existing personnel and improving internal review processes regarding accruals and the period end close process.

We are not yet required to comply with Section 404 of the Sarbanes-Oxley Act of 2002 due to a transition period established by rules of the Securities and Exchange Commission for newly public companies. At the end of the fiscal year ending June 30, 2010, Section 404 will require our management to provide an assessment of the effectiveness of our internal control over financial reporting, and our independent registered public accounting firm will be required to report on the effectiveness of internal control over financial reporting. We are in the process of performing the information system and process documentation, and evaluation and testing required for management to make this assessment and for our independent registered public accounting firm to provide their attestation report. We have not completed this process or the assessment, and this process will require significant amounts of management time and resources. In the course of evaluation and testing, management may identify deficiencies that will need to be addressed and remediated.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we are subject to various claims, complaints and legal actions in the normal course of business. We do not believe we are party to any currently pending litigation, the outcome of which will have a material adverse effect on our operations or financial position.

Item 1A. Risk Factors

The risk factor below updates and supplements the risk factors previously disclosed by us in Item 1A of the Second Amendment to our Registration Statement on Form 10 filed on October 27, 2008.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected.

In connection with our September 30, 2008 quarterly filing, we, together with our independent registered public accounting firm, identified a material weakness in our internal controls over financial reporting. A material weakness is a control deficiency, or a combination of control deficiencies, that results in a more than remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or deterred. Our management and our independent registered public accounting firm did not perform an evaluation of our internal control over financial reporting during such periods in accordance with the provisions of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley Act. Had we and our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional control deficiencies may have been identified by management or our independent registered public accounting firm, and those control deficiencies could have also represented one or more material weaknesses.

The material weakness related to our period end close process and specifically the accrual process and resulted in the recording of a material adjustment in the three month period ending September 30, 2008.

We are currently taking remedial measures to improve the effectiveness of our internal controls, including engaging our independent registered public accounting firm to review and test our current internal controls and provide recommendations for improvements to these internal controls processes, providing additional training to existing personnel and improving internal review processes regarding accruals and the period end close process.

We plan to continue to assess our internal controls and procedures and intend to take further action as necessary or appropriate to address any other matters we identify, including to effect compliance with Section 404 of the Sarbanes-Oxley Act of 2002 when we are required to make an assessment of our internal controls under Section 404 which is anticipated to be for fiscal 2010.

The existence of a material weakness is an indication that there is a more than remote likelihood that a material misstatement of our financial statements will not be prevented or detected in a future period while that material weakness continues to exist. The process of designing and implementing effective internal controls and procedures is a continuous effort that requires us to anticipate and react to changes in our business and the economic and regulatory environments and to expend significant resources to maintain a system of internal controls that is adequate to satisfy our reporting obligations as a public company. We cannot assure you that the measures taken to date or to be taken in the future will remediate the material weakness noted by our independent public accounting firm or that we will implement and maintain adequate controls over our financial processes in the future. In addition, we cannot assure you that additional material weaknesses or significant deficiencies in our internal controls will not be discovered in the future.

The standards required for a Section 404 analysis under the Sarbanes-Oxley Act of 2002 are significantly more stringent than those for a similar analysis for non-public companies. These more stringent standards require that our audit committee be advised and regularly updated on management's review of internal controls. Our management may not be able to effectively and timely implement controls and procedures that adequately respond to the increased regulatory compliance and reporting requirements that will be applicable to us as a public company. If we are not able to timely remedy the material weakness identified in connection with our interim quarterly review, or if we are not able to implement the requirements of Section 404 in a timely manner or with adequate compliance, management may not be able to assess that its internal controls over financial reporting are effective, which may subject us to adverse regulatory consequences and could result in a negative reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. In addition, if we fail to develop and maintain effective controls and procedures, we may be unable to provide the required financial information in a timely and reliable manner or otherwise comply with the standards applicable to us as a public company. Any failure by us to timely provide the required financial information could materially and adversely impact our financial condition and the market value of our securities.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

On October 16, 2008, the Company issued 819,378 shares of its common stock for the acquisition of Neosil to the stockholders of Neosil in exchange for all of the outstanding shares of Neosil. The number of shares issued was based on Neosil's estimated fair value of \$6.7 million. The shares issued in the acquisition were exempt from registration under the Securities Act pursuant to Section 4(2) of the Securities Act.

On October 23, 2008, the Company issued 3,980,259 shares of its common stock to institutional investors at a price of \$6.05 per share, and warrants to purchase 1,326,753 shares of common stock, to raise \$24,067,380 cash. For each three shares of common stock acquired, investors received a warrant to purchase one share of common stock. The shares and warrants issued in the private placement were exempt from registration under the Securities Act pursuant to Regulation S and Section 4(2) of the Securities Act. We are using the net proceeds for general corporate purposes, including our clinical development program, working capital and operating expenses.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Submissions of Matters to a Vote of Security Holders

None.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description
31.1	Certification of the Chief Executive Officer, as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Chief Financial Officer, as required pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certifications of the Chief Executive Officer and the Chief Financial Officer, as required pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and furnished herewith pursuant to SEC Release No. 33-8238

^{*} This certification is not deemed "filed" for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that Peplin, Inc. specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Peplin, Inc.

Dated: February 13, 2009 By: /s/ Thomas Wiggans

Thomas Wiggans Chief Executive Officer (Principal Executive Officer)

Dated: February 13, 2009 By: /s/ David J. B. Smith

David J. B. Smith Chief Financial Officer, Vice President Finance & Operations (Principal Financial Officer)

EXHIBIT INDEX

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CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

- I, Thomas Wiggans, certify that:
 - 1. I have reviewed this quarterly report on Form 10-Q of Peplin, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ THOMAS WIGGANS

Thomas Wiggans, Chairman of the Board and Chief Executive Officer (Principal Executive Officer)

Date: February 13, 2009

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

- I, David J.B. Smith, certify that:
 - 1. I have reviewed this quarterly report on Form 10-Q of Peplin, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ DAVID J. B. SMITH
David J. B. Smith,
Chief Financial Officer

(Principal Financial Officer)

Date: February 13, 2009

The following certifications are being furnished solely to accompany the Report pursuant to 18 U.S.C. § 1350 and in accordance with SEC Release No. 33-8238. These certifications shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall they be incorporated by reference in any filing of the Company under the Securities Act of 1933, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Certification of Principal Executive Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Peplin, Inc., a Delaware corporation (the "Company"), hereby certifies, to his knowledge, that:

- (i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended December 31, 2008 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended: and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ THOMAS WIGGANS

Thomas Wiggans
Chairman of the Board and
Chief Executive Officer
(Principal Executive Officer)

Date: February 13, 2009

A signed original of this written statement required by Section 906 has been provided to Peplin, Inc. and will be retained by Peplin, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Certification of Principal Financial Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Peplin, Inc., a Delaware corporation (the "Company"), hereby certifies, to his knowledge, that:

- (i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended December 31, 2008 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ DAVID J. B. SMITH

David J. B. Smith, Chief Financial Officer (Principal Financial Officer)

Date: February 13, 2009

A signed original of this written statement required by Section 906 has been provided to Peplin, Inc. and will be retained by Peplin, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.