



FOR IMMEDIATE RELEASE

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CPEX Pharmaceuticals Reports Third-Quarter 2008 Financial Results

Exeter, NH, November 6, 2008 – CPEX Pharmaceuticals, Inc. (NASDAQ: CPEX) today reported financial results for the third quarter ended September 30, 2008. The Company reported revenues of \$3.9 million and a net loss of \$1.0 million for the three months ended September 30, 2008.

CPEX began operating as an independent publicly traded company after its spin-off from Bentley Pharmaceuticals, Inc. (“Bentley”) on June 30, 2008. The financial results reported for the nine months ended September 30, 2008 and 2007 and three months ended September 30, 2007 include costs associated with the spin-off transaction and other allocated expenses of Bentley. Therefore, the results for those periods are not indicative of the results that might have occurred if CPEX had operated as an independent public company for those periods. The results of operations for the three months ended September 30, 2008 and balance sheet as of September 30, 2008 represent stand-alone financial information of CPEX and its subsidiaries.

Third-Quarter Highlights

For the third quarter of 2008 compared to the third quarter of 2007:

- Revenues increased 29% to \$3.9 million from \$3.1 million.
- Operating expenses increased 10% to \$5.0 million from \$4.6 million.
- Net loss decreased to \$1.0 million, or \$0.43 per share, from \$1.3 million, or \$0.59 per share.

The increase in revenues for the third quarter of 2008 was primarily due to higher royalties on sales of Testim[®] in the quarter. Testim’s market share is reported to have increased to 22% as of September 30, 2008, compared with 21% a year earlier. The higher operating expenses in the third quarter of 2008 were primarily attributable to a \$1.2 million non-cash charge resulting from the modification of equity awards issued to former Bentley employees in connection with the spin-off transaction. Of this amount, \$900,000 was charged to general and administrative expenses and \$300,000 was charged to research and development expenses. Research and development expenses decreased \$342,000 when compared to the same period of 2007, primarily due to the timing of our

preclinical and clinical activities and the lack of any allocated expenses from Bentley being recorded in the period. Research and development expenses are expected to vary from quarter to quarter due to the number, size and recruitment levels of clinical trials in any given period. Operating expenses reported in the three months ended September 30, 2007 included approximately \$423,000 in separation costs. No additional separation costs have been incurred by CPEX subsequent to its spin-off from Bentley in June 2008. The weighted average common shares outstanding for the nine month period ended September 30, 2008 assumes that 2,274,000 shares were outstanding for the first six months of 2008, which is the number of CPEX shares distributed to Bentley stockholders on June 30, 2008. The same number of shares is being used for the loss per share computation for all prior periods because no CPEX equity awards were outstanding prior to the spin-off. In addition, since CPEX is in a net loss position, any potential incremental shares were not used to compute diluted loss per share because the effect would have been anti-dilutive.

Year-to-Date Highlights

For the first nine months of 2008 compared to the comparable period in 2007;

- Revenues increased 44% to \$11.3 million from \$7.9 million.
- Operating expenses increased 20% to \$14.8 million from \$12.3 million.
- Net loss decreased to \$3.2 million, or \$1.40 per share, from \$4.0 million, or \$1.78 per share.

The increase in revenues for the nine months ended September 30, 2008 was primarily due to growth in royalties on sales of Testim. Revenues for the period also included approximately \$400,000 in funded research and development activities. In addition to the \$1.2 million non-cash equity charge, operating expenses also included a \$1.9 million increase in separation costs in the nine months ended September 30, 2008.

As of September 30, 2008, CPEX had unrestricted cash of approximately \$13.0 million, working capital of \$16.0 million and no debt.

Business Update

Paragraph IV Certification Notice: As previously announced, CPEX recently received a notice from Upsher-Smith Laboratories advising of the filing by Upsher-Smith of an Abbreviated New Drug Application (ANDA) containing a Paragraph IV certification under 21 U.S.C. Section 355(j) for testosterone gel. This notice states that Upsher-Smith Laboratories does not believe that their product infringes our patent which covers Testim. We are currently reviewing the details of this notice and, together with Auxilium, intend to pursue all available legal and regulatory options in defense of Testim, including enforcement of intellectual property rights and approved labeling.

Continued Progress with Serenity Pharmaceuticals Collaboration: On August 4, 2008, CPEX and privately held Serenity Pharmaceuticals Corporation announced a collaboration to develop an intranasal drug candidate for a urology indication using CPEX's patented drug delivery platform technology. The product candidate is in Phase I clinical trials.

Nasulin™ Phase II Clinical Trials Ongoing: CPEX's intranasal insulin product candidate, Nasulin, is continuing extensive clinical trials evaluating the safety and efficacy profile of the product in patients with Type 1 and Type 2 diabetes. Prior Phase I and II trials in patients with Type 1 or 2 diabetes as well as healthy volunteers have indicated that Nasulin appears to have a time/action profile similar to insulin naturally secreted by the pancreas.

Nasulin Manufacturing Agreement: On August 12, 2008, CPEX announced the signing of a contract manufacturing agreement with DPT Laboratories, Ltd. providing CPEX with the capacity to supply Nasulin in volumes sufficient for the remainder of projected Phase II and Phase III trials, and should Nasulin be registered and approved by the Food and Drug Administration, through the first years of commercialization.

Management Comments

“This quarter’s results are our first stand-alone results since our spin-off from Bentley and we are pleased to lay the groundwork for the future growth and evolution of CPEX,” said John A. Sedor, president and chief executive officer.

“Our drug delivery platform, CPE-215[®], continues to demonstrate its ability to effectively deliver a wide variety of drugs applicable to a broad range of indications,” said Sedor. “This not only assists in creating attractive candidates for our internal pipeline such as Nasulin, which has progressed in Phase II trials, but also for revenue generating partnerships similar to our relationship with Serenity Pharmaceuticals. As CPEX develops, we continue to seek ways to strategically grow the company and provide long-term value for our shareholders.

About CPEX Pharmaceuticals

CPEX Pharmaceuticals, Inc. (NASDAQ: CPEX) is an emerging specialty pharmaceutical company focused on the development, licensing and commercialization of pharmaceutical products utilizing CPEX’s validated drug delivery platform technology. CPEX has U.S. and international patents and other proprietary rights to technologies that facilitate the absorption of drugs. CPEX has licensed applications of its proprietary CPE-215[®] drug delivery technology to Auxilium Pharmaceuticals, Inc., which launched Testim[®], a topical testosterone gel, in 2003. CPEX also is developing an intranasal insulin product candidate, Nasulin, which is in Phase II clinical trials. CPEX maintains its headquarters in Exeter, NH. For more information about CPEX, please visit www.cpexpharm.com.

Safe Harbor Statement under the U.S. Private Securities Litigation Reform Act of 1995:

This press release contains forward-looking statements, including, without limitation, statements regarding the prospects for further applications of CPEX’s drug delivery platform technology, future prospects and opportunities for growth of CPEX, risks associated with the Paragraph IV certification regarding Testim, the prospects for CPEX’s development activities, including development of Nasulin, and further collaboration agreements. These forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from future results expressed or implied by such statements. Factors that may cause such differences include, but are not limited to, risks associated with the following: clinical trials may not demonstrate the efficacy and safety of CPEX product candidates, regulatory approvals may be delayed or not obtained at all, competition from other products, the unpredictability of patent protection, CPEX’s dependence on obtaining agreements with other parties to conduct clinical trials and commercialize its product candidates that use its drug delivery technology, CPEX’s products may not achieve market acceptance or favorable reimbursement rates from health insurers, intellectual property litigation, and other uncertainties detailed under “Risk Factors” in CPEX’s Registration Statement on Form 10 dated June 17, 2008 in connection with the distribution of CPEX’s common stock to stockholders of Bentley Pharmaceuticals, Inc. CPEX cautions investors not to place undue reliance on the forward-looking statements contained in this release. These statements speak only as of the date of this document, and CPEX undertakes no obligation to update or revise the statements, except as may be required by law.

CPEX Pharmaceuticals, Inc. and Subsidiaries
Unaudited Condensed Combined Statements of Operations

(in thousands, except per share data)

	For the Three Months Ended		For the Nine Months Ended	
	September 30,		September 30,	
	<u>2008</u>	<u>2007</u>	<u>2008</u>	<u>2007</u>
Royalties and other revenue	\$ 3,945	\$ 3,069	\$ 11,343	\$ 7,887
Operating expenses:				
General and administrative	2,574	1,523	5,023	3,875
Research and development	2,108	2,444	6,637	7,268
Separation costs	—	423	2,502	577
Depreciation and amortization	312	160	655	578
Total operating expenses	<u>4,994</u>	<u>4,550</u>	<u>14,817</u>	<u>12,298</u>
Loss from operations	<u>(1,049)</u>	<u>(1,481)</u>	<u>(3,474)</u>	<u>(4,411)</u>
Other income (expenses):				
Interest income	44	151	270	383
Interest expense	(1)	(1)	(4)	(9)
Other, net	—	(2)	—	(5)
Net loss	<u>\$ (1,006)</u>	<u>\$ (1,333)</u>	<u>\$ (3,208)</u>	<u>\$ (4,042)</u>
Net loss per common share:				
Basic and Diluted	<u>\$ (0.43)</u>	<u>\$ (0.59)</u>	<u>\$ (1.40)</u>	<u>\$ (1.78)</u>
Weighted average common shares outstanding:				
Basic and Diluted	<u>2,334</u>	<u>2,274</u>	<u>2,294</u>	<u>2,274</u>

CPEX Pharmaceuticals, Inc. and Subsidiaries
Unaudited Condensed Consolidated and Combined Balance Sheets

(in thousands, except per share data)

	<u>September 30, 2008</u>	<u>December 31, 2007</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 13,052	\$ 21,659
Receivables	4,179	3,245
Prepaid expenses and other	<u>545</u>	<u>707</u>
Total current assets	<u>17,776</u>	<u>25,611</u>
Non-current assets:		
Fixed assets, net	2,723	2,800
Intangible assets, net	2,492	2,942
Restricted cash	1,000	1,000
Other	<u>8</u>	<u>44</u>
Total non-current assets	<u>6,223</u>	<u>6,786</u>
Total assets	<u><u>\$ 23,999</u></u>	<u><u>\$ 32,397</u></u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 513	\$ 974
Accrued expenses	1,273	2,247
Other	<u>39</u>	<u>25</u>
Total current liabilities	<u>1,825</u>	<u>3,246</u>
Commitments and contingencies		
Stockholders' equity:		
Series A Preferred stock, \$0.01 par value, authorized 1,000 shares, issued and outstanding, none	—	—
Common stock, \$0.01 par value, authorized 35,000 shares, issued and outstanding, 2,374 shares	24	—
Additional paid-in capital	23,156	—
Bentley Pharmaceuticals, Inc. net investment	—	29,151
Accumulated deficit	<u>(1,006)</u>	<u>—</u>
Total stockholders' equity	<u>22,174</u>	<u>29,151</u>
Total liabilities and stockholders' equity	<u><u>\$ 23,999</u></u>	<u><u>\$ 32,397</u></u>

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