# UNITED STATES <br> SECURITIES AND EXCHANGE COMMISSION <br> Washington, D.C. 20549 <br> FORM 10-Q 

(Mark One)

## QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2011
or
o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from $\qquad$ to $\qquad$ .

Commission File Number: 001-33637

## Cumberland Pharmaceuticals Inc.

(Exact name of registrant as specified in its charter)

Tennessee
(State or other jurisdiction of incorporation or organization)

2525 West End Avenue, Suite 950, Nashville, Tennessee

37203
(Address of principal executive offices)
(Zipcode)
(615) 255-0068
(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 $\square$ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T ( $\$ 232.405$ of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files.) Yes o No o

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. (Check one):

Large accelerated filer o Accelerated filer $\square$
Non-accelerated filer o Smaller reporting company o (Do not check if a smaller reporting company)

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No $\square$ Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

## CUMBERLAND PHARMACEUTICALS INC. INDEX

Part I - Financial Information ..... 1
Item 1: Financial Statements (Unaudited) ..... 1
Condensed Consolidated Balance Sheets ..... 1
Condensed Consolidated Statements Of Income ..... 2
Condensed Consolidated Statements Of Cash Flows ..... 3
Condensed Consolidated Statements Of Equity And Comprehensive Income ..... 4
Item 2. Management's Discussion And Analysis Of Financial Condition And Results Of Operations ..... 8
Item 3: Quantitative And Qualitative Disclosure About Market Risk ..... 14
Item 4: Controls And Procedures ..... 15
Part II — Other Financial Information ..... 15
Item 1a: Risk Factors ..... 15
Item 2: Unregistered Sales Of Equity Securities And Use Of Proceeds ..... 15
Item 5: Other Information ..... 15
Item 6: Exhibits ..... 16
Signatures ..... 17

[^0]
## PART I — FINANCIAL INFORMATION

Item 1: Financial Statements

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES Condensed Consolidated Balance Sheets (Unaudited)

|  | June 30, 2011 | $\begin{gathered} \text { December 31, } \\ 2010 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: |
| ASSETS |  |  |  |
| Current assets: |  |  |  |
| Cash and cash equivalents | \$69,832,030 | \$ | 65,893,970 |
| Accounts receivable, net of allowances | 4,819,734 |  | 5,145,494 |
| Inventories | 7,453,251 |  | 7,683,842 |
| Other current assets | 2,238,864 |  | 2,315,536 |
| Total current assets | 84,343,879 |  | 81,038,842 |
| Property and equipment, net | 1,195,924 |  | 1,220,010 |
| Intangible assets, net | 7,116,260 |  | 7,427,223 |
| Other assets | 1,924,992 |  | 2,367,979 |
| Total assets | \$94,581,055 | \$ | 92,054,054 |

## LIABILITIES AND EQUITY

| Current liabilities: |  |  |
| :---: | :---: | :---: |
| Current portion of long-term debt | \$ 3,999,999 | \$ 2,666,668 |
| Accounts payable | 2,302,058 | 2,124,654 |
| Other current liabilities | 4,425,873 | 4,436,298 |
| Total current liabilities | 10,727,930 | 9,227,620 |
| Revolving line of credit | 1,825,951 | 1,825,951 |
| Long-term debt, excluding current portion | - | 2,666,665 |
| Other long-term obligations, excluding current portion | 602,099 | 618,343 |
| Total liabilities | 13,155,980 | 14,338,579 |

Commitments and contingencies

| Equity: |  |  |
| :---: | :---: | :---: |
| Shareholders' equity: |  |  |
| Common stock - no par value; 100,000,000 shares authorized; 20,400,085 and 20,338,461 shares issued and outstanding as of June 30, 2011 and December 31, 2010, respectively | 71,609,043 | 70,778,874 |
| Retained earnings | 9,897,585 | 6,998,806 |
| Total shareholders' equity | 81,506,628 | 77,777,680 |
| Noncontrolling interests | $(81,553)$ | $(62,205)$ |
| Total equity | 81,425,075 | 77,715,475 |
| Total liabilities and equity | \$94,581,055 | \$ 92,054,054 |

See accompanying notes to unaudited condensed consolidated financial statements.

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES Condensed Consolidated Statements of Income (Unaudited)

|  | Three months ended June 30, |  | Six months ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2011 | 2010 | 2011 | 2010 |
| Net revenues | \$ 14,389,741 | \$ 10,739,935 | \$25,056,668 | \$20,870,587 |
| Costs and expenses: |  |  |  |  |
| Cost of products sold | 1,283,160 | 863,725 | 2,070,098 | 1,723,013 |
| Selling and marketing | 5,904,444 | 5,848,123 | 11,193,028 | 11,455,635 |
| Research and development | 1,027,048 | 1,034,800 | 2,036,721 | 1,808,668 |
| General and administrative | 2,344,064 | 1,782,834 | 4,324,455 | 3,664,037 |
| Amortization of product license right | 171,726 | 171,726 | 343,453 | 343,452 |
| Other | 27,442 | 28,867 | 49,055 | 55,414 |
| Total costs and expenses | 10,757,884 | 9,730,075 | 20,016,810 | 19,050,219 |
| Operating income | 3,631,857 | 1,009,860 | 5,039,858 | 1,820,368 |
| Interest income | 52,260 | 50,334 | 95,169 | 111,013 |
| Interest expense | $(79,604)$ | $(405,956)$ | $(295,647)$ | $(751,908)$ |
| Net income before income taxes | 3,604,513 | 654,238 | 4,839,380 | 1,179,473 |
| Income tax expense | $(1,436,365)$ | $(374,461)$ | (1,959,949) | $(586,198)$ |
| Net income | 2,168,148 | 279,777 | 2,879,431 | 593,275 |
| Net loss at subsidiary attributable to noncontrolling interests | 9,471 | 7,527 | 19,348 | 17,607 |
| Net income attributable to common shareholders | \$ 2,177,619 | \$ 287,304 | \$ 2,898,779 | \$ 610,882 |
| Earnings per share attributable to common shareholders |  |  |  |  |
| - basic | \$ 0.11 | \$ 0.01 | \$ 0.14 | \$ 0.03 |
| - diluted | \$ 0.11 | \$ 0.01 | \$ 0.14 | \$ 0.03 |
| Weighted-average shares outstanding |  |  |  |  |
| - basic | 20,471,621 | 20,445,560 | 20,458,842 | 20,340,000 |
| - diluted | 20,661,719 | 21,207,645 | 20,719,714 | 21,302,119 |

See accompanying notes to unaudited condensed consolidated financial statements.

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES Condensed Consolidated Statements of Cash Flows (Unaudited)

|  | Six Months Ended June 30, |  |
| :---: | :---: | :---: |
|  | 2011 | 2010 |
| Cash flows from operating activities: |  |  |
| Net income | \$ 2,879,431 | \$ 593,275 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |
| Depreciation and amortization expense | 527,301 | 463,676 |
| Non-employee equity compensation | 44,574 | 45,554 |
| Stock-based compensation - employee stock options | 315,513 | 318,139 |
| Excess tax benefit derived from exercise of stock options | $(1,516,569)$ | $(462,814)$ |
| Non-cash interest expense | 123,654 | 132,866 |
| Net changes in assets and liabilities affecting operating activities: |  |  |
| Accounts receivable | 325,760 | 2,216,456 |
| Inventory | 230,591 | $(3,144,216)$ |
| Other current assets and other assets | 704 | 349,777 |
| Accounts payable and other accrued liabilities | 2,009,529 | 337,995 |
| Other long-term obligations | $(5,141)$ | $(95,541)$ |
| Net cash provided by operating activities | 4,935,347 | 755,167 |
| Cash flows from investing activities: |  |  |
| Additions to property and equipment | $(105,838)$ | $(126,315)$ |
| Additions to patents | $(46,344)$ | $(80,734)$ |
| Net cash used in investing activities | $(152,182)$ | $(207,049)$ |
| Cash flows from financing activities: |  |  |
| Principal payments on note payable | $(1,333,334)$ | $(6,061,973)$ |
| Costs of financing for long-term debt and credit facility | - | $(55,000)$ |
| Proceeds from exercise of stock options | 523,507 | 979,292 |
| Excess tax benefit derived from exercise of stock options | 1,516,569 | 462,814 |
| Payments made in connection with repurchase of common shares | $(1,551,847)$ | $(3,079,628)$ |
| Net cash used in financing activities | $(845,105)$ | $(7,754,495)$ |
| Net increase (decrease) in cash and cash equivalents | 3,938,060 | $(7,206,377)$ |
| Cash and cash equivalents at beginning of period | 65,893,970 | 78,701,682 |
| Cash and cash equivalents at end of period | \$69,832,030 | \$71,495,305 |
| Supplemental disclosure of cash flow information: |  |  |
| Non-cash investing and financing activities: |  |  |
| Common shares repurchased during period but not paid as of the end of the period | - | 203,802 |
| Additions to property and equipment not paid as of the end of the period | 40,070 | - |

See accompanying notes to unaudited condensed consolidated financial statements.

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES

 Condensed Consolidated Statements of Equity and Comprehensive Income (Unaudited)|  | Common stock |  | Retained earnings | Noncontrolling interests |  | Total equity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shares | Amount |  |  |  |  |
| Balance, December 31, 2010 | 20,338,461 | \$70,778,874 | \$ 6,998,806 | \$ | $(62,205)$ | \$77,715,475 |
| Stock-based compensation nonemployees | - | 28,660 | - |  | - | 28,660 |
| Exercise of options and related tax benefit | 346,850 | 2,040,076 | - |  | - | 2,040,076 |
| Stock-based compensation employees | - | 313,280 | - |  | - | 313,280 |
| Repurchase of shares | $(285,226)$ | $(1,551,847)$ | - |  | - | $(1,551,847)$ |
| Net and comprehensive income | - | - | 2,898,779 |  | $(19,348)$ | 2,879,431 |
| Balance, June 30, 2011 | $\underline{\text { 20,400,085 }}$ | \$71,609,043 | \$ 9,897,585 | \$ | $(81,553)$ | \$81,425,075 |

See accompanying notes to unaudited condensed consolidated financial statements.

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES Notes to condensed consolidated financial statements (unaudited)

## (1) BASIS OF PRESENTATION

In the opinion of management, the accompanying unaudited condensed consolidated financial statements of Cumberland Pharmaceuticals Inc. and its subsidiaries, or the Company or Cumberland, have been prepared on a basis consistent with the December 31, 2010 audited consolidated financial statements and include all adjustments, consisting of only normal recurring adjustments, necessary to fairly present the information set forth herein. All significant intercompany accounts and transactions have been eliminated in consolidation. The condensed consolidated financial statements have been prepared in accordance with the regulations of the Securities and Exchange Commission, or the SEC, and omit certain information and footnote disclosure necessary to present the statements in accordance with U.S. generally accepted accounting principles. These condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2010. The results of operations for the first six months of 2011 are not necessarily indicative of the results to be expected for the entire fiscal year or any future period.

Total comprehensive income was comprised solely of net income for the three and six months ended June 30, 2011 and 2010.

## Accounting Policies:

In preparing the condensed consolidated financial statements in conformity with U.S. generally accepted accounting principles, management must make decisions that impact the reported amounts and the related disclosures. Such decisions include the selection of the appropriate accounting principles to be applied and the assumptions on which to base accounting estimates. In reaching such decisions, management applies judgments based on its understanding and analysis of the relevant circumstances, historical experience, and other available information. Actual amounts could differ from those estimated at the time the condensed consolidated financial statements are prepared.

Management has evaluated events occurring subsequent to June 30, 2011 for accounting and disclosure implications.

## (2) EARNINGS PER SHARE

The following tables reconcile the numerator and denominator used to calculate diluted earnings per share for the three and six months ended June 30, 2011 and 2010:

|  | Three Months Ended June 30, |  |
| :---: | :---: | :---: |
|  | 2011 | 2010 |
| Numerator: |  |  |
| Net income attributable to common shareholders | \$ 2,177,619 | \$ 287,304 |
| Denominator: |  |  |
| Weighted-average shares outstanding - basic | 20,471,621 | 20,445,560 |
| Dilutive effect of other securities | 190,098 | 762,085 |
| Weighted-average shares outstanding - diluted | $\underline{\text { 20,661,719 }}$ | $\underline{\text { 21,207,645 }}$ |

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES

Notes to condensed consolidated financial statements - continued (unaudited)

|  | Six Months Ended June 30, |  |
| :---: | :---: | :---: |
|  | 2011 | 2010 |
| Numerator: |  |  |
| Net income attributable to common shareholders | \$ 2,898,779 | \$ 610,882 |
| Denominator: |  |  |
| Weighted-average shares outstanding - basic | 20,458,842 | 20,340,000 |
| Dilutive effect of other securities | 260,872 | 962,119 |
| Weighted-average shares outstanding - diluted | 20,719,714 | 21,302,119 |

As of June 30, 2011 and 2010, restricted stock awards and options to purchase 1,149,374 and 657,532 shares of common stock, respectively, were outstanding but were not included in the computation of diluted EPS because the effect would be antidilutive.

## (3) SEGMENT REPORTING

We operate in one segment, specialty pharmaceutical products. Management has chosen to organize the Company based on the type of products sold. All of our assets are located in the United States. We did not have any sales to nonU.S. customers during the three months ended June 30, 2011 and 2010, respectively. We had sales of less than $\$ 0.1$ million to non-U.S. customers during the six months ended June 30, 2011 and 2010, respectively.

The Company's net revenues consisted of the following for the three and six months ended June 30, 2011 and 2010:

|  | Three Months Ended June 30, |  |  | Six Months Ended June 30, |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2011 |  | 2010 | 2011 | 2010 |
| Products: |  |  |  |  |  |
| Acetadote | \$ 12,167,302 | \$ | 8,308,560 | \$20,711,895 | \$16,031,833 |
| Kristalose | 2,101,971 |  | 2,271,418 | 4,172,352 | 4,581,401 |
| Caldolor | 86,027 |  | 45,776 | 97,981 | 65,081 |
| Other | 34,441 |  | 114,181 | 74,440 | 192,272 |
| Total net revenues | \$ 14,389,741 |  | 10,739,935 | \$25,056,668 | \$20,870,587 |

## (4) INVENTORIES

We work closely with third parties to manufacture and package finished goods for sale. We take title to the finished goods at the time of shipment from the manufacturer and warehouse such goods until distribution and sale. Inventories are stated at the lower of cost or market with cost determined using the first-in, first-out method.

We purchased certain packaging materials related to the manufacture of Caldolor. As these materials are consumed as part of the manufacturing process, the costs associated with these materials will be used to offset the finished goods price from the manufacturer. As of June 30, 2011 and December 31, 2010, inventory was comprised of the following:

|  |  | June 30, <br> 2011 | $\begin{gathered} \text { December 31, } \\ 2010 \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Raw materials |  | 588,637 | \$ | 356,676 |
| Finished goods |  | 6,864,614 |  | 7,327,166 |
| Total |  | 7,453,251 | \$ | 7,683,842 |

## CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES

 Notes to condensed consolidated financial statements - continued (unaudited)
## (5) SHAREHOLDERS' EQUITY

In May 2010, we announced a share repurchase program to repurchase up to $\$ 10.0$ million of our outstanding common shares pursuant to Rule 10b-18 of the Securities Act. In January 2011, our Board of Directors modified this plan to provide for the repurchase of $\$ 10.0$ million of our outstanding common shares, in addition to the amount repurchased in 2010. In the first six months of 2011, we repurchased 285,226 shares for $\$ 1.6$ million.

During 2011, options to purchase 407,544 shares of common stock were exercised, of which 60,694 shares were used in settlement of the exercise price. The exercise of these options created a tax deduction of approximately $\$ 1.4$ million. Of this amount, approximately $\$ 1.0$ million was previously recognized for book purposes, resulting in a deferred tax asset of approximately $\$ 0.4$ million at December 31, 2010. Upon exercise, the associated deferred tax asset was used to offset current income taxes payable. The incremental excess tax benefit was also used to offset the estimated tax liability arising from the results of operations for the three and six months ended June 30, 2011, with a corresponding increase in common stock. As of June 30, 2011, we had approximately $\$ 60.3$ million of unrecognized federal net operating loss carryforwards created by the exercise of nonqualified options. These benefits will be recognized in the period in which they are able to reduce current taxes payable.

## (6) INCOME TAXES

During the second quarter of 2011, we were notified by the Internal Revenue Service that our 2009 federal tax return was selected for examination. The 2009 federal tax return is the only return open for audit. We expect the examination to be completed in the fourth quarter of 2011.

## (7) COLLABORATIVE AGREEMENTS

We are a party to several collaborative arrangements with certain research institutions to identify and pursue promising pre-clinical pharmaceutical product candidates. The Company has determined these collaborative agreements do not meet the criteria for accounting under Accounting Standards Codification 808, Collaborative Agreements. The agreements do not specifically designate each party's rights and obligations to each other under the collaborative arrangements. Except for patent defense costs, expenses incurred by one party are not required to be reimbursed by the other party. The funding for these programs is generally provided through private sector investments or federal Small Business (SBIR/STTR) grant programs. Expenses incurred under these collaborative agreements are included in research and development expenses in the condensed consolidated statements of income. Funding received from private sector investments and grants are recorded as net revenues in the condensed consolidated statements of income.

## (8) SUBSEQUENT EVENTS

Pursuant to the share repurchase plan, as modified by the Board of Directors in January 2011, we repurchased an additional 43,272 shares for approximately $\$ 0.3$ million for the period from July 1, 2011 to July 29, 2011.

In July 2011, we paid in full the outstanding term debt balance of $\$ 4.0$ million. We did not incur any prepayment or other fees associated with the payoff.

In August 2011, we amended our revolving credit facility with Bank of America to provide for up to $\$ 10$ million of credit with the option to increase the line to $\$ 20$ million. The interest rate is LIBOR plus an Applicable Margin, as defined in the agreement. The credit facility will expire on December 31, 2014. We did not incur any fees associated with the amendment.

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

The following discussion contains certain forward-looking statements which reflect management's current views of future events and operations. These statements involve certain risks and uncertainties, and actual results may differ materially from them. Forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We caution you that our actual results may differ significantly from the results we discuss in these forward looking statements. Some important factors which may cause results to differ from expectations include: availability of additional debt and equity capital required to finance the business model; market conditions at the time additional capital is required; significant leverage and debt service requirements; our ability to continue to acquire branded products; product sales; and management of our growth and integration of our acquisitions. Other important factors that may cause actual results to differ materially from forward-looking statements are discussed in "Risk Factors" on pages 22 through 35 and "Special Note Regarding Forward-Looking Statements" on page 35 of our Annual Report on Form 10-K for the year ended December 31, 2010. We do not undertake to publicly update or revise any of our forward-looking statements, even in the event that experience or future changes indicate that the anticipated results will not be realized. The following presentation of management's discussion and analysis of financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and related notes thereto included in this Form 10-Q.

## OVERVIEW

## Our Business

We are a profitable and growing specialty pharmaceutical company focused on the acquisition, development and commercialization of branded prescription products. Our primary target markets are hospital acute care and gastroenterology, which are characterized by concentrated physician bases that we believe can be penetrated effectively by relatively small, targeted sales forces. Cumberland is dedicated to providing innovative products that improve quality of care for patients.

Our marketed product portfolio includes Acetadote ${ }^{\circledR}$ (acetylcysteine) Injection for the treatment of acetaminophen poisoning, Caldolor® (ibuprofen) Injection, the first injectable treatment for pain and fever approved in the United States, and Kristalose ${ }^{\circledR}$ (lactulose) for Oral Solution, a prescription laxative. In April 2011, we acquired rights to a late-stage product candidate that we intend to develop under the brand name Hepatoren ${ }^{\text {TM }}$ (ifetroban) Injection for the treatment of hepatorenal syndrome. We market and sell our approved products through our hospital and field sales forces in the United States and are working with partners to reach international markets.

We have both product development and commercial capabilities, and believe we can leverage our existing infrastructure to support our expected growth. Our management team consists of pharmaceutical industry veterans experienced in business development, product development, commercialization and finance. Our business development team identifies, evaluates and negotiates product acquisition, in-licensing and out-licensing opportunities. Cumberland's product development team develops proprietary product formulations, manages our clinical trials, prepares all regulatory submissions and manages our medical call center. Our products are manufactured by third parties, which are overseen and managed by our quality control and manufacturing group. Our marketing and sales professionals are responsible for our commercial activities, and we work closely with our third party distribution partner to ensure steady product supply.

We became profitable in 2004, and since then have generated sufficient cash flows to fund our development and marketing programs. In 2009, we completed an initial public offering of our common stock to help facilitate further growth.

## Growth Strategy

Our growth strategy involves maximizing potential of our existing products and continuing to build a portfolio of new, differentiated products. Specifically, we expect to grow by executing the following plans:

- We market our products in the United States through a comprehensive marketing and promotional effort, and we are working to bring our products to select international markets-with our first international launch occurring in 2010.
- We look for opportunities to expand into additional patient populations with new product indications, whether through our own development work or by supporting promising investigator-initiated studies at research institutions.
- We actively pursue opportunities to acquire additional late-stage development product candidates as well as marketed products in our target medical specialties.
- We supplement the aforementioned growth strategy with the early-stage drug development activities of Cumberland Emerging Technologies, Inc., or CET, our majority-owned subsidiary. CET partners with university research centers to identify and cost-effectively develop promising early-stage product candidates, which Cumberland Pharmaceuticals has the opportunity to commercialize. Our acquisition of Hepatoren in April 2011 represents the first development candidate to emerge from CET as an addition to Cumberland's portfolio.

We were incorporated in 1999 and have been headquartered in Nashville, Tennessee since inception. Our website address is www.cumberlandpharma.com. We make available through our website our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and any amendments, as well as other documents, as soon as reasonably practicable after their filing with the SEC. These filings are also available to the public through the Internet by the SEC at www.sec.gov.

## Quarter Highlights and Recent Developments

Acetadote ${ }^{\circledR}$

## New Formulation

In January 2011, the U.S. Food and Drug Administration (FDA) approved our supplemental new drug application (sNDA) for our new formulation of Acetadote, which was the result of a phase IV commitment Cumberland made to the FDA upon receipt of initial marketing approval of the product. The new formulation does not contain Ethylene diamine tetracetic acid or any other stabilization and chelating agents and is free of preservatives. We launched the next generation product, which replaced the previously marketed formulation, in the first quarter of 2011 and response from the medical community has been favorable. During the second quarter, we also amended our supply agreement for Acetadote with Bioniche, which was recently acquired by Mylan.

In July, we filed a response with the U.S. Patent and Trademark Office for a patent to protect our proprietary discoveries related to the new Acetadote formulation. This formulation patent was allowed and issued in China in April 2011. We also recently filed a second U.S. patent application related to the safety profile of the new formulation.

## Supplemental New Drug Application for Acetadote

In the first quarter of 2010, we submitted an application to the FDA for the use of Acetadote in patients with nonacetaminophen acute liver failure. This sNDA included data from a clinical trial led by investigators at the University of Texas Southwestern Medical Center indicating that early-stage acute liver failure patients treated with Acetadote have a significantly improved chance of survival without a transplant and that these patients can also survive a significant number of days longer without transplant. In December 2010, the FDA issued a Complete Response Letter indicating that it had completed its review of the application and identified additional items that must be addressed prior to approval of the potential new indication. Since then, we have been in discussions with the FDA to determine whether we can address the additional requirements for that approval. We recently identified new data to support this application and are analyzing it before presenting it to the FDA.

## Caldolor ${ }^{\circledR}$

In late 2009, we initiated the launch of Caldolor, our intravenous formulation of ibuprofen, in the U.S. through our sales organization. In 2010, we focused our sales efforts primarily on securing formulary approval and stocking nationally for Caldolor. In the second quarter of 2011, we changed our focus and implemented a pull-through strategy for Caldolor, with an emphasis on activities required to build volume and use in centers that have already stocked the product.

We are currently enrolling patients in four clinical studies designed to support marketing of Caldolor. Two of these clinical trials are designed to support pediatric use, including a pediatric fever study to evaluate safety, efficacy and pharmacokinetics of Caldolor in hospitalized children as well as a pediatric pain study. Two registry studies with Caldolor are also underway and are designed to gather additional safety and efficacy data on use of the product in adults. The first of these studies is evaluating Caldolor in treating pain and fever in a wide range of hospitalized patients and the second evaluates the product for management of pain in surgical patients.

## Hepatoren ${ }^{\text {TM }}$

In April 2011, we entered into an agreement to acquire the rights to ifetroban, a new Phase II product candidate. We have initiated clinical development under the brand name Hepatoren (ifetroban) Injection and are evaluating this candidate for the treatment of critically ill hospitalized patients suffering from hepatorenal syndrome (HRS), a life-threatening condition involving progressive kidney failure for which there is no U.S. approved pharmaceutical treatment.

Our acquisition of the rights to the ifetroban program includes an extensive clinical database and non-clinical data package as well as manufacturing processes, know-how and intellectual property. Ifetroban was initially developed by Bristol-Myers Squibb, or BMS, for significant cardiovascular indications. BMS conducted extensive preclinical and clinical studies for its own target indications and eventually donated the entire program to Vanderbilt University. Researchers at Vanderbilt identified ifetroban as a potentially valuable compound in treating patients for several niche indications. We acquired the rights to the ifetroban program from Vanderbilt through CET and intend to develop it for several potential indications, including as an Orphan Drug for HRS for which we will pursue seven years of marketing exclusivity.

The FDA has cleared our IND for this product candidate and we have initiated a Phase II dose escalation clinical study to evaluate Hepatoren for the treatment of HRS. We have commenced manufacturing and have filed patent applications to protect intellectual property related to the new indication. We believe this product candidate is an excellent strategic fit for us given our established presence in the hospital acute care market.

International Markets
In the second quarter of 2011 we executed agreements with partners for commercialization of Caldolor and Acetadote in two new Asian markets, Malaysia and Taiwan. In Malaysia, we are partnering with Insanbakti and in Taiwan with Harvest \& Health Co., Ltd. These agreements are part of a larger initiative to secure widespread distribution of our products in appropriate Asian markets, and follow our recent agreement with DB Pharm Korea for Caldolor in South Korea.

The application for regulatory approval of Caldolor in Canada was also recently submitted by our partner Alveda Pharma. Review of the application for approval of Caldolor in Australia is underway in conjunction with our partner Phebra Pty Ltd. We are also currently working to identify appropriate arrangements for commercialization of our products in other markets.

## CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

Please see a discussion of our critical accounting policies and significant judgments and estimates on pages 43 through 46 in "Management's Discussion and Analysis" of our Annual Report on Form 10-K for the year ended December 31, 2010.

## Accounting Estimates and Judgments

The preparation of condensed consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. We base our estimates on past experience and on other factors we deem reasonable given the circumstances. Past results help form the basis of our judgments about the carrying value of assets and liabilities that are not determined from other sources. Actual results could differ from these estimates. These estimates, judgments and assumptions are most critical with respect to our accounting for revenue recognition, provision for income taxes, inventory reserves, stock-based compensation, research and development accounting and intangible assets.

## RESULTS OF OPERATIONS

Three months ended June 30, 2011 compared to the three months ended June 30, 2010
Net revenues. Net revenues for the three months ended June 30, 2011 totaled approximately $\$ 14.4$ million, representing an increase of approximately $\$ 3.7$ million, or $34 \%$, over the same period in 2010 . The increase was primarily due to increased revenue associated with Acetadote, partially offset by slightly lower revenue for Kristalose. The increase in Acetadote revenue was driven by (1) acceptance of the new formulation of Acetadote and (2) increased sales volume that was caused by a shortage of the oral form of acetylcysteine during 2011. The decrease in Kristalose revenue was primarily due to increased generic competition.

Cost of products sold. Cost of products sold as a percentage of net revenues increased slightly from $8.0 \%$ for the three months ended June 30, 2010 to $8.9 \%$ for the same period in 2011. The increase in cost of products sold as a percentage of net revenues was driven by the change in our sales mix during the periods, with Acetadote comprising more of our net revenues during the three months ended June 30, 2011 as compared to the same period in 2010 offset by the recognition in 2011 of product inventory reserves of approximately $\$ 0.4$ million.

General and administrative. General and administrative expense for the three months ended June 30, 2011 totaled approximately $\$ 2.3$ million, representing an increase of approximately $\$ 0.6$ million, or $31 \%$, over the same period in 2010. The increase was primarily due to increased consulting and charitable contribution expenses offset by a decrease in legal, accounting and tax professional fees.

Interest expense. Interest expense for the three months ended June 30, 2011 totaled approximately $\$ 0.1$ million, representing a decrease of approximately $\$ 0.3$ million as compared to the same period in 2010. The decrease is primarily attributable to the decrease in our average term debt balance in 2011 as compared to 2010.

During the second quarter of 2011, we notified Bank of America of our intent to repay the outstanding balance of our term debt ( $\$ 4.0$ million at June 30, 2011) in early July 2011. As a result, we accelerated the recognition of unamortized deferred financing costs associated with the term debt. In addition, we reversed the accrual made in the first quarter of 2011 associated with the additional loan fees based on certain financial metrics determined as of September 30, 2011. These costs substantially offset each other.

Income tax expense. Income tax expense for the three months ended June 30, 2011 totaled approximately $\$ 1.4$ million, representing an increase of $\$ 1.1$ million over the same period in 2010. As a percentage of net income before income taxes, income tax expense decreased from 57.2\% for the three months ended June 30, 2010 to $39.8 \%$ for the three months ended June 30, 2011. The decrease, in percentage of net income before income taxes, was due to an increase in our projected pre-tax income for 2011 without a corresponding increase in our permanent tax differences.

During 2009 and continuing thru June 2011, significant stock options were exercised that resulted in an excess tax benefit to us. As of June 30, 2011, we have approximately $\$ 60.3$ million of these tax deductions available to us that will be used to offset future income tax liabilities. In accordance with current accounting pronouncements, these deductions have not been recognized in the condensed consolidated balance sheet as of June 30, 2011. We will recognize the tax benefits in future periods when they are used to offset taxes payable. We expect our cash outflow related to income tax payments to be minimal during 2011 and 2012.

## Six months ended June 30, 2011 compared to the six months ended June 30, 2010

Net revenues. Net revenues for the six months ended June 30, 2011 totaled approximately $\$ 25.1$ million, representing an increase of approximately $\$ 4.2$ million, or $20 \%$, over the same period in 2010 . The increase in net revenues is primarily due to increased Acetadote revenue partially offset by a decrease in Kristalose revenue. The increase in Acetadote revenue was driven by (1) acceptance of the new formulation of Acetadote and (2) increased sales volume that was caused by a shortage of the oral form of acetylcysteine during 2011. The decrease in Kristalose revenue was primarily due increased generic competition.

Cost of products sold. Cost of products sold as a percentage of net revenues remained consistent at $8.3 \%$ for the six months ended June 30, 2011 and 2010. The sales mix changed between the periods, with Acetadote comprising a higher percentage in 2011 than 2010, which would ordinarily result in the percentage decreasing. However, as previously discussed, we recognized product inventory reserves during 2011 that offset the impact of the change in the sales mix.

Selling and marketing. Selling and marketing expense for the six months ended June 30, 2011 totaled approximately $\$ 11.2$ million, representing a decrease of approximately $\$ 0.3$ million, or $2 \%$, over the same period in 2010. The decrease was primarily due to (1) a decrease in royalty expense due to the Acetadote royalty agreement expiring in January 2011, (2) decreased sales force and related expenses as a result of converting our hospital sales force from contract employees to Cumberland employees. These decreases were partially offset by increased marketing and advertising expenses as we rolled out new advertising campaigns in 2011, as well as launching our Speakers Bureau in early 2011. The Speakers Bureau is a Company-sponsored event whereby a well-respected doctor will present and advocate the use of Caldolor in pain management to a targeted audience.

Research and development. Research and development expense for the six months ended June 30, 2011 totaled approximately $\$ 2.0$ million, representing an increase of approximately $\$ 0.2$ million, or $13 \%$, over the same period in 2010. The increase was primarily due to (1) increased salary and related expenses as we build our infrastructure to support our development efforts and (2) costs related to the annual FDA product and establishment fees for our products.

General and administrative. General and administrative expense for the six months ended June 30, 2011 totaled approximately $\$ 4.3$ million, representing an increase of approximately $\$ 0.7$ million, or $18 \%$, over the same period in 2010. The increase was primarily due to increased consulting and charitable contribution expenses offset by a decrease in legal, accounting and tax professional fees.

Interest expense. Interest expense for the six months ended June 30, 2011 totaled approximately $\$ 0.3$ million, representing a decrease of approximately $\$ 0.5$ million as compared to the same period in 2010. The decrease is primarily attributable to the decrease in our average term debt balance in 2011 as compared to 2010. Offsetting this decrease was an increase in amortization expense in 2011 associated with the deferred financing costs that was accelerated due to the early payment of our term debt in July 2011.

Income tax expense. Income tax expense for the six months ended June 30, 2011 totaled approximately $\$ 2.0$ million, representing an increase of approximately $\$ 1.4$ million, over the same period in 2010. As a percentage of net income before income taxes, income tax expense decreased from 49.7\% for the six months ended June 30, 2010 to $40.5 \%$ for the six months ended June 30, 2011. The decrease, in percentage of net income before income taxes, was due to an increase in our projected pre-tax income for 2011 without a corresponding increase in our permanent tax differences.

## LIQUIDITY AND CAPITAL RESOURCES

## Working Capital

Our primary sources of liquidity are cash flows provided by our operations, our borrowings and the cash proceeds from our initial public offering of common stock that was completed in August 2009. We believe that our internally generated cash flows, amounts available under our credit facilities and cash on hand will be adequate to service existing debt, finance internal growth and fund capital expenditures. As of June 30, 2011 and December 31, 2010, cash and cash equivalents was $\$ 69.8$ million and $\$ 65.9$ million, respectively, working capital (current assets minus current liabilities) was $\$ 73.6$ million and $\$ 71.8$ million, respectively, and our current ratio (current assets to current liabilities) was $7.9 x$ and $8.8 x$, respectively. As of June 30, 2011, we had an additional $\$ 4.2$ million available to us on our line of credit.

In July 2011, we repaid all amounts owed under our term debt agreement with Bank of America.
On August 2, 2011, we entered into the Fifth Amended and Restated Loan Agreement, or the Agreement, for our revolving credit facility with Bank of America, N.A., or the Bank, to provide for up to $\$ 10$ million of credit. The credit facility may be increased up to $\$ 20$ million, upon the satisfaction of certain conditions. The interest rate is the BBA LIBOR Daily Floating Rate plus an Applicable Margin, as those terms are defined in the Agreement. We reduced the Applicable Margin from our prior amendments. The credit facility was extended to expire on December 31, 2014. Interest is payable quarterly. Borrowings are collateralized by substantially all of our assets.

Under the Agreement, we are subject to certain financial covenants including, but not limited to maintaining a Leverage Ratio and Interest Coverage Ratio, as those terms are defined in the Agreement, that are determined on a quarterly basis, and other restrictive covenants.

Furthermore, the Bank may terminate the Agreement and require us to repay all outstanding amounts under certain conditions, as described in the Agreement, including, but not limited to: (1) cross-default on any other credit agreement with an outstanding principal amount in excess of $\$ 500,000$, (2) material adverse change in the our business condition, operations or properties, (3) violation of any covenant or (4) a change in control of the Company. We did not incur any additional fees in connection with the execution of the Amendment.

The foregoing description of the Agreement is qualified in its entirety by the full text of the Agreement, a copy of which is attached as Exhibit 10.16 and incorporated herein by reference.

The following table summarizes our net changes in cash and cash equivalents for the six months ended June 30, 2011 and 2010:

|  | Six Months Ended June 30, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2011 |  | 2010 |  |
|  | (in thousands) |  |  |  |
| Net cash provided by (used in): |  |  |  |  |
| Operating activities | \$ | 4,935 | \$ | 755 |
| Investing activities |  | (152) |  | (207) |
| Financing activities |  | (845) |  | $(7,754)$ |
| Net increase (decrease) in cash and cash equivalents (1) | \$ | 3,938 | \$ | $\underline{(7,206)}$ |

(1) The sum of the individual amounts may not agree due to rounding.

The net increase in cash and cash equivalents of $\$ 3.9$ million for the six months ended June 30, 2011 was primarily due to cash generated from our operating activities. Net income for the period was $\$ 2.9$ million. In addition, our accounts payable and other current liabilities, net of the excess tax benefit generated by the exercise of nonqualified options in 2011, increased by $\$ 2.0$ million from December 31, 2010, which had a favorable impact on our operating cash flows. Contributing to our increase in cash was the cash proceeds received from the exercise of stock options during 2011. These increases in cash and cash equivalents resulting from our operating activities were partially offset by scheduled debt payments of $\$ 1.3$ million.

The net decrease in cash and cash equivalents of $\$ 7.2$ million for the six months ended June 30,2010 was primarily due to cash used in financing activities, which included (1) principal payments on our term debt of approximately $\$ 6.1$ million,
(2) the repurchase of common stock of approximately $\$ 3.1$ million, (3) proceeds from the exercise of stock options of approximately $\$ 1.0$ million and (4) the excess tax benefit derived from the exercise of nonqualified options of approximately $\$ 0.5$ million.

The share repurchase program discussed in Part II, Item 2, is incorporated by reference into this Item.

## OFF-BALANCE SHEET ARRANGEMENTS

During the six months ended June 30, 2011 and 2010, the Company did not engage in any off-balance sheet arrangements.

## Item 3: Quantitative and Qualitative Disclosure about Market Risk

Interest Rate Risk
We are exposed to market risk related to changes in interest rates on our revolving credit facility and our term note payable. We do not utilize derivative financial instruments or other market risk-sensitive instruments to manage exposure to interest rate changes. The main objective of our cash investment activities is to preserve principal while maximizing interest income through low-risk investments.

The interest rate related to borrowings under our revolving credit facility and term debt is a variable rate of LIBOR plus an applicable margin, as defined in the debt agreement (4.69\% at June 30, 2011). As of June 30, 2011, we had outstanding borrowings of approximately $\$ 5.8$ million under our revolving credit facility and term debt combined. As previously noted, we repaid all outstanding amounts under our term debt agreement with Bank of America in July 2011. If interest rates increased by $1.0 \%$, our annual interest expense on our borrowings would increase by less than $\$ 0.1$ million.

## Exchange Rate Risk

While we operate primarily in the United States, we are exposed to foreign currency risk. One of our supply agreements for Caldolor is denominated in Australian dollars. Additionally, some of our research and development is performed abroad. As of June 30, 2011, our outstanding payables denominated in a foreign currency were less than $\$ 0.1$ million.

Currently, we do not utilize financial instruments to hedge exposure to foreign currency fluctuations. We believe our exposure to foreign currency fluctuation is minimal as our purchases in foreign currency have a maximum exposure of 90 days based on invoice terms, with much of the exposure being limited to 30 days based on the due date of the invoice. Foreign currency exchange gains and losses were not significant for the six months ended June 30, 2011 and 2010. Neither a $10 \%$ increase nor decrease from current exchange rates would have a significant effect on our operating results or financial condition.

## Item 4: Controls and Procedures

Our principal executive and financial officer evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2011. Based on that evaluation, our disclosure controls and procedures are considered effective to ensure that material information relating to us and our consolidated subsidiaries is made known to officers within these entities in order to allow for timely decisions regarding required disclosure.

PART II — OTHER FINANCIAL INFORMATION

## Item 1a: Risk Factors

Information regarding risk factors appears on pages 22 through 35 in our Annual Report on Form 10-K for the year ended December 31, 2010 under the section titled "Risk Factors." There have been no material changes from the risk factors previously discussed therein.

Item 2: Unregistered Sales of Equity Securities and Use of Proceeds
Purchases of Equity Securities
The following table summarizes the purchase of equity securities by the Company during the three months ended June 30, 2011:

| Period | Total <br> Number of Shares (or Units) <br> Purchased | Average Price Paid per Share (or Unit) |  | Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs | Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plan or Programs |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| April 1 - April 30 | 36,588 | \$ | 5.19 | 36,588 | \$ | 9,796,912 |
| May 1 - May 31 | 120,311(1) |  | 5.13 | 59,617 |  | 9,494,796 |
| June 1 - June 30 | 57,459 |  | 5.01 | 57,459 |  | 9,206,961 |
| Total | 214,358 |  |  |  |  |  |

(1) The purchase of 60,694 shares of common stock was made pursuant to a net-share settlement under which the stock option holder tendered these shares acquired upon exercise for settlement of the exercise price of the options. The purchase price of this transaction was the then-current fair market value of common stock on the date of the transaction.

## Item 5: Other Information

On August 2, 2011, we entered into the Fifth Amended and Restated Loan Agreement with Bank of America, N.A. The information included in Part I, Item 2, under "Working Capital," pertaining to this agreement is incorporated herein by reference to that section.

## Item 6: Exhibits

## No. <br> Description

$10.16 \dagger \dagger$ Fifth Amended and Restated Loan Agreement by and between Cumberland Pharmaceuticals Inc. and Bank of America, N.A., dated August 2, 2011
31.1 Certification of Chief Executive and Principal Financial Officer Pursuant to Rule 13-14(a) of the Securities Exchange Act of 1934 as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1 Certification of Chief Executive and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
$\dagger \dagger$ Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from the Registration Statement and submitted separately to the Securities and Exchange Commission.

## SIGNATURES

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

Cumberland Pharmaceuticals Inc.
Dated: August 8, 2011
By: /s/ A.J. Kazimi
A. J. Kazimi

Chief Executive and
Principal Financial Officer
*Certain portions of this exhibit have been omitted pursuant to a request for confidential treatment which has been filed separately with the SEC.

FIFTH AMENDED AND RESTATED
LOAN AGREEMENT
August 2, 2011
by and between
CUMBERLAND PHARMACEUTICALS INC., as the Borrower
and
BANK OF AMERICA, N.A.,
as the Bank
\$10,000,000

TABLE OF CONTENTS

1. FACILITY NO. 1: LINE OF CREDIT AMOUNT AND TERMS ..... 1
1.1 Line of Credit Amount ..... 1
1.2 Availability Period ..... 1
1.3 Interest Rate ..... 1
1.4 Repayment Terms ..... 2
1.5 Prepayments ..... 2
1.6 Increase in Facility No. 1 Commitment ..... 2
2. FACILITY NO. 2: TERM LOAN AMOUNT AND TERMS ..... 3
3. FEES AND EXPENSES ..... 3
3.1 Fees ..... 3
3.2 Expenses ..... 3
3.3 Reimbursement Costs ..... 4
4. COLLATERAL ..... 4
4.1 Personal Property ..... 4
5. DISBURSEMENTS, PAYMENTS AND COSTS ..... 5
5.1 Disbursements and Payments ..... 5
5.2 Telephone and Telefax Authorization ..... 5
5.3 Direct Debit (Pre-Billing) ..... 5
5.4 Banking Days ..... 6
5.5 Interest Calculation ..... 6
5.6 Default Rate ..... 6
6. CONDITIONS ..... 6
6.1 Authorizations and Incumbency ..... 6
6.2 Governing Documents ..... 7
6.3 CET Intercompany Debt ..... 7
6.4 Loan Documents ..... 7
6.5 Perfection and Evidence of Priority ..... 7
6.6 Payment of Fees, Etc. ..... 7
6.7 Good Standing ..... 7
6.8 Legal Opinion ..... 7
6.9 Financial Statements ..... 7
6.10 Insurance ..... 8
6.11 Consents, Licenses, Permits, Assignments ..... 8
6.12 Representations, Warranties and No Default ..... 8
6.13 Other Required Documentation ..... 8
7. REPRESENTATIONS AND WARRANTIES ..... 8
7.1 Formation ..... 8
7.2 Authorization ..... 8
7.3 Enforceable Agreements ..... 8
7.4 Good Standing ..... 9
7.5 No Conflicts ..... 9
7.6 Financial Information ..... 9
7.7 Lawsuits ..... 9
7.8 Collateral ..... 9
7.9 Permits, Franchises ..... 9
7.10 Other Obligations ..... 9
7.11 Tax Matters ..... 9
7.12 No Event of Default ..... 9
7.13 Insurance ..... 10
7.14 Location of Borrower ..... 10
7.15 Capitalization ..... 10
7.16 Material Adverse Change ..... 10
7.17 Subsidiaries ..... 10
8. COVENANTS ..... 11
8.1 Use of Proceeds ..... 11
8.2 Financial Information ..... 11
8.3 Leverage Ratio ..... 12
8.4 Interest Coverage Ratio ..... 13
8.5 [Reserved.] ..... 13
8.6 Capital Expenditures ..... 13
8.7 Lease Expenditures ..... 13
8.8 Restricted Payments ..... 13
8.9 Bank as Principal Depository ..... 14
8.10 Other Debts ..... 14
8.11 Other Liens ..... 15
8.12 Maintenance of Assets ..... 15
8.13 Investments ..... 15
8.14 Loans ..... 15
8.15 Additional Negative Covenants ..... 16
8.16 Notices to Bank ..... 16
8.17 Insurance ..... 16
8.18 Compliance with Laws ..... 17
8.19 ERISA Plans ..... 17
8.20 Books and Records ..... 17
8.21 Visits, Inspections and Audits ..... 17
8.22 Perfection of Liens ..... 17
8.23 Cooperation ..... 17
8.24 Collateral Account Notification and Acknowledgement ..... 17
8.25 Subsidiaries ..... 18
9. HAZARDOUS SUBSTANCES ..... 18
9.1 Indemnity Regarding Hazardous Substances ..... 18
9.2 Compliance Regarding Hazardous Substances ..... 18
9.3 Notices Regarding Hazardous Substances ..... 18
9.4 Site Visits, Observations and Testing ..... 18
9.5 Definition of Hazardous Substances ..... 19
9.6 Continuing Obligation ..... 19
10. DEFAULT AND REMEDIES ..... 19
10.1 Failure to Pay ..... 19
10.2 Other Bank Agreements ..... 19
10.3 Cross-Default ..... 19
10.4 False Information ..... 20
10.5 Bankruptcy ..... 20
10.6 Receivers ..... 20
10.7 Lien Priority ..... 20
10.8 Lawsuits ..... 20
10.9 Judgments ..... 20
10.10 [Reserved.] ..... 20
10.11 Material Adverse Change ..... 20
10.12 Government Action ..... 20
10.13 Default Under Related Documents ..... 21
10.14 Other Breach Under Agreement ..... 21
10.15 Change in Control ..... 21
11. ENFORCING THIS AGREEMENT; MISCELLANEOUS ..... 21
11.1 GAAP ..... 21
11.2 Tennessee Law ..... 21
11.3 Successors and Assigns ..... 21
11.4 Interest and Loan Charges Not to Exceed Maximum Amounts Allowed by Law ..... 22
11.5 Arbitration and Waiver of Jury Trial ..... 22
11.6 Severability; Waivers ..... 23
11.7 Costs and Attorneys' Fees ..... 23
11.8 Individual Liability ..... 23
11.9 One Agreement ..... 23
11.10 Indemnification ..... 24
11.11 Notices ..... 24
11.12 Headings; Terminology, Etc. ..... 24
11.13 Counterparts ..... 25
11.14 Existing Loan Agreement and Existing Loan Documents ..... 25
Schedules
Schedule 1 Existing Loan Documents
Schedule 7.7 Litigation
Schedule 8.10 Liabilities
Schedule 8.11 LiensSchedule 8.14 Loans/Extensions of Credit
Exhibits
Exhibit A Compliance Certificate

## FIFTH AMENDED AND RESTATED LOAN AGREEMENT

THIS FIFTH AMENDED AND RESTATED LOAN AGREEMENT (the "Agreement") dated as of August 2, 2011, is between BANK OF AMERICA, N.A., a national banking association (the "Bank") and CUMBERLAND PHARMACEUTICALS INC., a Tennessee corporation (the "Borrower").

WHEREAS, the Borrower and the Bank are parties to a certain Fourth Amended and Restated Loan Agreement dated as of July 22, 2009, between the Borrower and the Bank (as heretofore amended, modified or supplemented from time to time, the "Existing Loan Agreement") and certain of the loan documents listed on Schedule 1 hereto (as heretofore amended, modified or supplemented from time to time, the "Existing Loan Documents");

WHEREAS, at the Borrower's request and in reliance upon the representations and inducements of the Borrower set forth herein, the Bank has agreed to modify the terms and conditions of the Existing Loan Agreement and to amend and restate the Existing Loan Agreement in its entirety as more particularly hereinafter set forth; and

WHEREAS, the Borrower and the Bank have agreed to amend or to amend and restate certain of the Existing Loan Documents pursuant to the Loan Documents (as hereinafter defined);

NOW, THEREFORE, in consideration of the Facility No. 1 Commitment and the Facility No. 2 Commitment described below (collectively, the "Facilities"), the mutual covenants and agreements contained herein, and intending to be legally bound hereby, the Bank and the Borrower agree as follows:

## 1. FACILITY NO. 1: LINE OF CREDIT AMOUNT AND TERMS

### 1.1 Line of Credit Amount.

(a) Subject to and upon the terms, conditions and provisions of this Agreement, including Section 1.2 below, the Bank will provide a line of credit to the Borrower in a principal amount not to exceed Ten Million Dollars ( $\$ 10,000,000$ ) outstanding at any one time (the "Facility No. 1 Commitment").
(b) This is a revolving line of credit. During the availability period, the Borrower may repay principal amounts and reborrow them.
(c) The Borrower agrees not to permit the principal balance outstanding to exceed the amount of the Facility No. 1 Commitment. If the Borrower exceeds this limit, the Borrower will immediately pay the excess to the Bank upon the Bank's demand.

### 1.2 Availability Period.

The Facility No. 1 Commitment is available between the date of this Agreement and December 31, 2014, or such earlier date as the availability may terminate as provided in this Agreement (the "Facility No. 1 Expiration Date").

### 1.3 Interest Rate.

(a) The interest rate is a rate per year equal to the BBA LIBOR Daily Floating Rate plus the Applicable Margin; provided, however, that in no event shall the interest payable in respect of amounts advanced pursuant to the Facility No. 1 Commitment exceed the maximum amounts collectible under applicable law from time to time.
(b) The "BBA LIBOR Daily Floating Rate" is a fluctuating rate of interest equal to the rate per annum equal to the British Bankers Association LIBOR Rate ("BBA LIBOR"), as published by Reuters (or other commercially available source providing quotations of BBA LIBOR as selected by the Bank from time to time) as determined for each banking day at approximately 11:00 a.m. London time two (2) London Banking Days prior to the date in question, for U.S. Dollar deposits (for delivery on the first day of such interest period) with a one month term, as adjusted from time to time in the Bank's sole discretion for reserve requirements, deposit insurance assessment rates and other regulatory costs. If such rate is not available at such time for any reason, then the rate for that interest period will be determined by such alternate method as reasonably selected by the Bank. A "London Banking_Day" is a day on which banks in London are open for business and dealing in offshore dollars.
(c) The "Applicable Margin" means and refers to the following percentages per annum, based upon the Borrower's Leverage Ratio as set forth in the most recent compliance certificate received by the Bank pursuant to Section 8.2(c):

| Pricing Level | $<1.50$ | Leverage Ratio | $\geq 1.50$ |
| :---: | :---: | :---: | :---: |

Any increase or decrease in the Applicable Margin resulting from a change in the Borrower's Leverage Ratio shall become effective as of the first banking day following the date a compliance certificate is delivered pursuant to Section 8.2(c); provided, however, that if a compliance certificate is not delivered when due in accordance with Section 8.2(c), then Pricing Level 2 shall apply as of the first banking day after the date on which such compliance certificate was required to have been delivered until the first banking day after the date on which such certificate is delivered.

### 1.4 Repayment Terms.

(a) The Borrower will pay interest on September 30, 2011 and on the last day of each December, March, June and September thereafter until payment in full of any principal outstanding under this facility.
(b) The Borrower will repay in full any principal, interest or other charges outstanding under this facility no later than the Facility No. 1 Expiration Date.

### 1.5 Prepayments.

The Borrower may prepay this loan in full or in part at any time and from time to time, without premium or penalty.
1.6 Increase in Facility No. 1 Commitment.
(a) The Borrower may from time to time request an increase in the Facility No. 1 Commitment by an amount (for all such requests) not exceeding $\$ 10,000,000$; provided that (i) any such request for an increase shall be in a minimum amount of $\$ 5,000,000$, (ii) the Borrower may make a maximum of two (2) such requests, and (iii) no such request may be made after the day that is one hundred eighty (180) days prior to the Facility No. 1 Expiration Date or if an event of default exists hereunder.
(b) Not later than thirty (30) days after the Lender's receipt of such request, the Lender shall notify the Borrower whether it will consent to such increase (which consent may be given or withheld in the Lender's sole and absolute discretion) and shall indicate in such notice any terms and conditions to be included as a part of such increase or to be met or satisfied for such increase to be effective. If the Lender fails to respond within the above time period, it shall be deemed not to have consented to such increase.
(c) If the Lender consents to such increase and any conditions specified by the Lender for the effectiveness of such increase have been met or satisfied, the approved increase shall occur effective as of the date specified by the Lender, which date shall not be more than fifteen (15) days after such conditions have been met or satisfied (the "Increase Effective Date"). As one of the conditions precedent to such increase, the Borrower shall deliver to the Lender a certificate of the Borrower and each Obligor (as hereinafter defined), dated as of the Increase Effective Date and signed by an authorized officer of the Borrower or such Obligor, as applicable, (i) certifying and attaching the resolutions or other authorizing actions adopted by or on behalf of the Borrower or such Obligor approving or consenting to such increase, and (ii) in the case of the Borrower, certifying that, before and after giving effect to such increase, (A) the representations and warranties contained in Section 7 and the other Loan Documents are true and correct on and as of the Increase Effective Date, except to the extent that such representations and warranties specifically refer to an earlier date, in which case they are true and correct as of such earlier date, and (B) no event of default exists hereunder.

## 2. FACILITY NO. 2: TERM LOAN AMOUNT AND TERMS

There is no Facility No. 2; accordingly, provisions of this Agreement relating to the Facility No. 2 Commitment shall be disregarded as to such term.

## 3. FEES AND EXPENSES

### 3.1 Fees.

(a) Fee Letter. The Borrower agrees to pay to the Bank fees and other compensation as provided in the fee letter dated July 22, 2009, by and between the Bank and the Borrower, as amended by Amendment to Fee Letter dated September 29, 2010, by and between the Bank and the Borrower, and as the same has been or may be further supplemented, amended, modified or amended and restated from time to time pursuant to agreement of the Borrower and the Bank (as so supplemented, amended, modified or amended and restated, the "Fee Letter").
(b) Unused Commitment Fee
(i) Facility No. 1 Commitment. The Borrower agrees to pay a fee on any difference between the Facility No. 1 Commitment and the amount of credit it actually uses, determined by the daily amount of credit outstanding during the specified period. The fee will be calculated at the Applicable Facility No. 1 Commitment Fee Rate. The fee is due and payable on September 30, 2011 and on the last day of each December, March, June and September thereafter until the expiration of the availability period. As used herein:
"Applicable Facility No. 1 Commitment Fee Rate" means one-quarter of one percent (0.25\%) per year.
(ii) Facility No. 2 Commitment. Not applicable.

### 3.2 Expenses.

Promptly, and in any event within ten (10) banking days after any demand by the Bank therefor, the Borrower will repay the Bank for expenses including filing, recording and search fees, appraisal fees, title report fees and documentation fees.

### 3.3 Reimbursement Costs

(a) Promptly, and in any event within ten (10) banking days after any demand by the Bank therefor, the Borrower will reimburse the Bank for any expenses it incurs in the preparation of this Agreement and any agreement or instrument required by this Agreement. Expenses include reasonable attorneys' fees, including any allocated costs of the Bank's in-house counsel to the extent permitted by applicable law.
(b) Promptly, and in any event within ten (10) banking days after any demand by the Bank therefor, the Borrower will reimburse the Bank for the cost of periodic field examinations of the Borrower's books, records and Collateral, and appraisals of the Collateral, at such intervals as the Bank may reasonably require, but no less frequently than annually. The actions described in this paragraph may be performed by employees of the Bank or by independent appraisers.

## 4. COLLATERAL

### 4.1 Personal Property.

The personal property listed below now owned or owned in the future by the parties listed below will secure the Borrower's obligations to the Bank under this Agreement as indicated and further defined in the security agreement(s) executed by the owners of the collateral. In addition, all personal property collateral owned by the Borrower securing this Agreement shall also secure all other present and future obligations of the Borrower to the Bank (excluding any consumer credit covered by the federal Truth in Lending law, unless the Borrower has otherwise agreed in writing or received written notice thereof). All personal property collateral securing any other present or future obligations of the Borrower to the Bank shall also secure this Agreement.
(a) Equipment and fixtures owned by the Borrower or any Obligor (as hereinafter defined).
(b) Inventory owned by the Borrower or any Obligor.
(c) Accounts, contract rights, chattel paper, instruments, deposit accounts, letter of credit rights, general intangibles and documents of title owned by the Borrower or any Obligor.
(d) Securities or other investment property owned by the Borrower or any Obligor as described in one or more pledge agreements required by the Bank (including equity interests in Subsidiaries of the Borrower).

Regulation U of the Board of Governors of the Federal Reserve System places certain restrictions on loans secured by margin stock (as defined in the Regulation). The Bank and the Borrower shall comply with Regulation U. If any of the collateral is margin stock, the Borrower shall provide to the Bank a Form U-1 Purpose Statement.
(e) Deposit accounts with the Bank and owned by the Borrower or any Obligor.
(f) Patents, trademarks and other general intangibles owned by the Borrower or any Obligor.
(g) The Amended and Restated Promissory Note dated December 30, 2008, in the principal amount not exceeding $\$ 1,500,000$, made and executed by Cumberland Emerging Technologies, Inc., a Tennessee corporation ("CET"), payable to the order of the Borrower, evidencing the now existing and hereafter arising indebtedness of CET to the Borrower (together with any and all extensions, modifications, renewals and replacements thereof, the "CET Pledged Note"), and the Security Agreement dated April 6, 2006, between CET and the Borrower, as amended by First Amendment to Security Agreement dated December 30, 2008 and as further amended by Second Amendment to Security Agreement dated July 22, 2009 (as the same has been or may be amended, restated, supplemented, extended, modified, restructured, renewed or replaced from time to time, the "CET Security Agreement"), together with any related instruments, documents and agreements.

As used herein, "Collateral" shall mean and refer to all property and interests in property of the Borrower or any Obligor now or hereafter securing the indebtedness and other obligations of the Borrower to the Bank in connection with the Facilities

## 5. DISBURSEMENTS, PAYMENTS AND COSTS

5.1 Disbursements and Payments.
(a) Each payment by the Borrower will be made in U.S. Dollars and immediately available funds by direct debit to a deposit account as specified below or, for payments not required to be made by direct debit, by mail to the address shown on the Borrower's statement or at one of the Bank's banking centers in the United States.
(b) Each disbursement by the Bank and each payment by the Borrower will be evidenced by records kept by the Bank. In addition, the Bank may, at its discretion, require the Borrower to sign one or more promissory notes.
5.2 Telephone and Telefax Authorization.
(a) The Bank may honor telephone or telefax instructions for advances or repayments given, or purported to be given, by any one of the individuals authorized to sign loan agreements on behalf of the Borrower or any other individual designated by any one of such authorized signers.
(b) Advances will be deposited in and repayments will be withdrawn from the primary operating account of the Borrower maintained with the Bank or such other of the Borrower's accounts with the Bank as is designated in writing from time to time by the Borrower and approved for such purposes by the Bank (the "Designated Account").
(c) The Borrower will indemnify and hold the Bank harmless from all liability, loss, and costs in connection with any act resulting from telephone or telefax instructions the Bank reasonably believes are made by any individual authorized by the Borrower to give such instructions. This paragraph will survive this Agreement's termination, and will benefit the Bank and its officers, employees, and agents.
5.3 Direct Debit (Pre-Billing).
(a) The Borrower agrees that the Bank will debit the Designated Account on the date each payment of principal and interest and any fees from the Borrower becomes due (the "Due Date").
(b) Prior to each Due Date, the Bank will mail to the Borrower a statement of the amounts that will be due on that Due Date (the "Billed Amount"). The bill will be mailed a specified number of calendar days prior to the Due Date, which number of days will be mutually agreed from time to time by the Bank and the Borrower. The calculations in the bill will be made on the assumption that no new extensions of credit or payments will be made between the date of the billing statement and the Due Date, and that there will be no changes in the applicable interest rate.
(c) The Bank will debit the Designated Account for the Billed Amount, regardless of the actual amount due on that date (the "Accrued Amount"). If the Billed Amount debited to the Designated Account differs from the Accrued Amount, the discrepancy will be treated as follows:
(i) If the Billed Amount is less than the Accrued Amount, the Billed Amount for the following Due Date will be increased by the amount of the discrepancy. The Borrower will not be in default by reason of any such discrepancy.
(ii) If the Billed Amount is more than the Accrued Amount, the Billed Amount for the following Due Date will be decreased by the amount of the discrepancy.

Regardless of any such discrepancy, interest will continue to accrue based on the actual amount of principal outstanding without compounding. The Bank will not pay the Borrower interest on any overpayment.
(d) The Borrower will maintain sufficient funds in the Designated Account to cover each debit. If there are insufficient funds in the Designated Account on the date the Bank enters any debit authorized by this Agreement, the Bank may reverse the debit.

### 5.4 Banking Days.

Unless otherwise provided in this Agreement, a banking day is a day other than a Saturday, Sunday or other day on which commercial banks are authorized to close, or are in fact closed, in the state where the Bank's lending office is located, and, if such day relates to amounts bearing interest at an offshore rate (if any), means any such day on which dealings in dollar deposits are conducted among banks in the offshore dollar interbank market. All payments and disbursements that would be due on a day that is not a banking day will be due on the next banking day. All payments received on a day that is not a banking day will be applied to the credit on the next banking day.

### 5.5 Interest Calculation.

Except as otherwise stated in this Agreement, all interest and fees, if any, will be computed on the basis of a 360-day year and the actual number of days elapsed. This results in more interest or a higher fee than if a 365-day year is used. Installments of principal that are not paid when due under this Agreement shall continue to bear interest until paid.

### 5.6 Default Rate.

Upon the occurrence of any default or after maturity or after judgment has been rendered on any obligation under this Agreement, all amounts outstanding under this Agreement, including any interest, fees, or costs that are not paid when due, will at the option of the Bank bear interest at a rate that is four percentage points ( $4.00 \%$ ) higher than the rate of interest otherwise provided under this Agreement. This may result in compounding of interest. This will not constitute a waiver of any default.

## 6. CONDITIONS

Before the Bank is required to extend any credit to the Borrower under this Agreement, it must receive any documents and other items it may reasonably require, in form and content acceptable to the Bank, including any items specifically listed below.

### 6.1 Authorizations and Incumbency.

If the Borrower or any Obligor is anything other than a natural person, evidence that the execution, delivery and performance by the Borrower and each such Obligor of this Agreement and any instrument or agreement required under this Agreement have been duly authorized.

A certificate of the secretary of the Borrower and each Obligor as to the incumbency and signature of all officers of the Borrower or such Obligor, as applicable, authorized to execute or attest to any instrument or agreement required under this Agreement.

### 6.2 Governing Documents.

If required by the Bank, copies of the organizational documents of the Borrower and each Obligor.

### 6.3 CET Intercompany Debt.

Such amendments or modifications of the CET Pledged Note and the CET Security Agreement as the Bank reasonably may request, in form and substance satisfactory to the Bank, including confirmation of the assignment to the Bank of, and grant to the Bank of a security interest in, all of the Borrower's right, title and interest in and to the CET Pledged Note and the CET Security Agreement, in form and substance satisfactory to the Bank.

### 6.4 Loan Documents.

Signed originals of such security agreements (including intellectual property security agreements) covering the Collateral, promissory notes, warrants, fee letters and other instruments, documents and agreements as the Bank from time to time shall require to evidence or secure the Facility No. 1 Commitment and the Facility No. 2 Commitment or otherwise in connection therewith (collectively, the "Loan Documents").

### 6.5 Perfection and Evidence of Priority.

Evidence that the security interests and liens in favor of the Bank are valid, enforceable, properly perfected in a manner acceptable to the Bank and prior to all others' rights and interests, except those the Bank consents to in writing.

### 6.6 Payment of Fees, Etc.

Such instruments and documents as are required by the Fee Letter, together with payment of all fees and other amounts due and owing to the Bank, including payment of all accrued and unpaid expenses incurred by the Bank as required by the paragraph entitled "Reimbursement Costs."

### 6.7 Good Standing.

Certificates of good standing for the Borrower and each Obligor from the state of formation and from any other state in which the Borrower or any such Obligor is required to qualify to conduct its business.

### 6.8 Legal Opinion.

A written opinion from the Borrower's legal counsel, covering such matters as the Bank may require. The legal counsel and the terms of the opinion must be acceptable to the Bank.

### 6.9 Financial Statements.

Detailed consolidated projections (including balance sheet, profit and loss statement and statement of cash flow) by product line on an annual basis for fiscal years 2012, 2013 and 2014 (which projections shall be delivered as soon after the date of this Agreement as is reasonably practicable, but in no event more than 30 days after the date of this Agreement).

Evidence of insurance coverage, as required in the "Covenants" section of this Agreement.

### 6.11 Consents, Licenses, Permits, Assignments.

(a) Evidence satisfactory to the Bank that the Borrower and each Obligor have obtained all requisite consents and approvals required to be obtained from any person to permit the transactions contemplated by this Agreement and the other Loan Documents executed in connection herewith to be consummated in accordance with their respective terms and conditions.
(b) Evidence satisfactory to the Bank that Borrower, the Obligors and the Collateral are in compliance with all applicable governmental requirements and that all permits, and any necessary licenses and approvals have been obtained.
6.12 Representations, Warranties and No Default.

Receipt by the Bank of a certificate of a properly authorized officer of the Borrower, stating that (a) each of the representations and warranties contained herein is true and correct at and as of the date hereof with the same force and effect as if made on such date and (b) no default hereunder or under any of the other Loan Documents executed in connection therewith has occurred and is continuing.

### 6.13 Other Required Documentation.

All other documents, instruments, agreements, opinions, certificates, insurance policies, consents and evidences of other legal matters, in form and substance satisfactory to the Bank and its counsel, that are required by the terms of any term sheet or commitment of the Bank relating to the credit that is the subject of this Agreement or that the Bank otherwise may reasonable request.

## 7. REPRESENTATIONS AND WARRANTIES

When the Borrower signs this Agreement, and until the Bank is repaid in full, the Borrower makes the following representations and warranties. Each request for an extension of credit constitutes a renewal of these representations and warranties as of the date of the request:

### 7.1 Formation.

If the Borrower or any Subsidiary is anything other than a natural person, it is duly formed and existing under the laws of the state or other jurisdiction where organized.

### 7.2 Authorization.

This Agreement, and any instrument or agreement required hereunder, are within the powers of the Borrower or the applicable Obligor, have been duly authorized, and do not conflict with any of its organizational papers.

### 7.3 Enforceable Agreements.

This Agreement is a legal, valid and binding agreement of the Borrower, enforceable against the Borrower in accordance with its terms, and any instrument or agreement required hereunder, when executed and delivered by the Borrower or the applicable Obligor(s), will be similarly legal, valid, binding and enforceable.

### 7.4 Good Standing.

Each of the Borrower and its Subsidiaries is properly licensed, in good standing and, where required, in compliance with fictitious name statutes in each jurisdiction in which it does business.

### 7.5 No Conflicts.

This Agreement does not conflict with any law, agreement, or obligation by which the Borrower or any of its Subsidiaries is bound.

### 7.6 Financial Information.

All financial and other information that has been or will be supplied to the Bank is sufficiently complete to give the Bank accurate knowledge of the financial condition of the Borrower and its Subsidiaries, including all material contingent liabilities. Since the date of the most recent financial statement provided to the Bank, there has been no material adverse change in the business condition (financial or otherwise), operations, properties or prospects of the Borrower or any of its Subsidiaries.

### 7.7 Lawsuits.

Except as disclosed in Schedule 7.7, there is no lawsuit, tax claim or other dispute pending or threatened against the Borrower or any of its Subsidiaries that, if lost, would impair the Borrower's or any Obligor's financial condition or ability to repay the Facilities.

### 7.8 Collateral.

All Collateral required in this Agreement is owned by the grantor of the security interest free of any title defects or any liens or interests of others, except (a) liens in existence on the date of this Agreement and disclosed in Schedule 8.11 and (b) liens securing purchase money debt or indebtedness arising under capitalized lease obligations permitted by this Agreement; provided, however, that in each case any such liens shall attach only to the specific item(s) of property or asset(s) financed with such purchase money debt or capitalized lease.

### 7.9 Permits, Franchises.

Each of the Borrower and its Subsidiaries possesses all permits, memberships, franchises, contracts, licenses required and all trademark rights, trade name rights, patent rights, copyrights, and fictitious name rights necessary to enable it to conduct the business in which it is now engaged.

### 7.10 Other Obligations.

Neither the Borrower nor any Subsidiary is in default on any obligation for borrowed money, any purchase money obligation or any other material lease, commitment, contract, instrument or obligation, except as have been disclosed in writing to the Bank.

### 7.11 Tax Matters.

The Borrower has no knowledge of any pending assessments or adjustments of its or any Subsidiary's income tax for any year and all taxes due have been paid, except as have been disclosed in writing to the Bank.

### 7.12 No Event of Default.

There is no event that is, or with notice or lapse of time or both would be, a default under this Agreement.

The Borrower has obtained, and maintained in effect, the insurance coverage required in the "Covenants" section of this Agreement.

### 7.14 Location of Borrower.

The place of business of the Borrower and its Subsidiaries (or, if the Borrower and its Subsidiaries have more than one place of business, their chief executive office) is located as follows:

Cumberland Pharmaceuticals Inc.
2525 West End Avenue, Suite 950
Nashville, Tennessee 37203

### 7.15 Capitalization.

(a) As of June 30, 2011, the authorized capital stock of the Borrower consists of (1) 100,000,000 shares of common stock, no par value per share ("Common Shares"), of which $20,400,085$ shares (the "Outstanding Common Shares") are issued and outstanding, and (2) $23,000,000$ shares of preferred stock, no par value per share, of which none are issued and outstanding. All of the Outstanding Common Shares are duly authorized, validly issued and outstanding and fully paid and nonassessable and free of preemptive rights.
(b) The Borrower's amended 1999 Stock Option Plan (the "1999 Plan") has been replaced with the Borrower's 2007 Long-Term Incentive Compensation Plan and the Borrower's 2007 Directors' Incentive Plan (collectively, the "2007 Plans"). As of June 30, 2011, (i) 2,650,000 options to purchase Common Shares ("Options") are authorized for issuance under the 2007 Plans, and (ii) 1,652,658 Options are issued and outstanding under the 1999 Plan and the 2007 Plans, of which 1,297,797 Options are fully vested and exercisable.

### 7.16 Material Adverse Change.

Since December 31, 2010, no material adverse change has occurred on or in (a) the properties, business, prospects, operations, management or financial condition of the Borrower and its Subsidiaries, taken as a whole, or (b) the ability of the Borrower or any Obligor to perform any of its obligations under this Agreement or the other Loan Documents to which it is a party.

### 7.17 Subsidiaries.

As of the date of this Agreement, the Borrower has no Subsidiaries other than CET and Cumberland Pharma Sales Corp., a Tennessee corporation ("CPSC"). As used herein, "Subsidiary" of a person means a corporation, partnership, joint venture, limited liability company or other business entity of which a majority of the shares of securities or other interests having ordinary voting power for the election of directors or other governing body (other than securities or interests having such power only by reason of the happening of a contingency) are at the time beneficially owned, or the management of which is otherwise controlled, directly, or indirectly through one or more intermediaries, or both, by such person. Unless otherwise specified, all references herein to a "Subsidiary" or to "Subsidiaries" shall refer to a Subsidiary or Subsidiaries of the Borrower.

## 8. COVENANTS

The Borrower agrees, so long as credit is available under this Agreement and until the Bank is repaid in full:

### 8.1 Use of Proceeds.

(a) To use the proceeds of the Facilities only (i) to refinance the credit facilities provided pursuant to the Existing Credit Agreement and for general operating and working capital expenses and (ii) to extend credit to CET as permitted by this Agreement.
(b) [Reserved.]
(c) In all events, the proceeds of the credit extended under this Loan Agreement may not be used directly or indirectly to purchase or carry any "margin stock" as that term is defined in Regulation U of the Board of Governors of the Federal Reserve System, or to extend credit to or invest in other parties for the purpose of purchasing or carrying any such "margin stock," or to reduce or retire any indebtedness incurred for such purpose.

### 8.2 Financial Information.

To provide the following financial information and statements in form and content acceptable to the Bank, and such additional information as requested by the Bank from time to time:
(a) Within 150 days after the end of each fiscal year of the Borrower, the annual financial statements of the Borrower, which shall include a balance sheet, profit and loss statement and statement of cash flow, certified and dated by the chief executive or chief financial officer of the Borrower. These financial statements must be audited (with an opinion satisfactory to the Bank) by a certified public accountant acceptable to the Bank. The statements shall be prepared on a consolidated basis and include unaudited statements on a consolidating basis.
(b) Within 60 days after the beginning of each fiscal year of the Borrower, (i) a copy of the Borrower's operating and capital expenditure budget for such fiscal year, certified and dated by the chief executive or chief financial officer of the Borrower, and (ii) detailed consolidated projections (including balance sheet, profit and loss statement and statement of cash flow) by product line on a quarterly basis for that fiscal year and on an annual basis for next two fiscal years.
(c) Within 45 days after the end of each fiscal quarter of the Borrower (including the last quarter in each fiscal year), quarterly financial statements of the Borrower, which shall include a balance sheet, profit and loss statement and statement of cash flow. The profit and loss statement and the statement of cash flow to be submitted under this subsection shall be presented on a quarterly and a year-to-date basis, and the financial statements to be submitted under this subsection shall include comparisons with the same period for the prior year. These financial statements may be company-prepared. The statements shall be prepared on a consolidated and consolidating basis. Such financial statements shall be dated and certified by the chief executive or chief financial officer of the Borrower and accompanied by a compliance certificate setting forth (i) the information and computations (in sufficient detail) to establish that the Borrower is in compliance with all financial covenants at the end of the period covered by the financial statements then being furnished and (ii) whether there existed as of the date of such financial statements, and whether there exists as of the date of the certificate, any default under this Agreement and, if any such default exists, specifying the nature thereof and the action the Borrower is taking and proposes to take with respect thereto. The compliance certificate shall be substantially in the form attached hereto as Exhibit A.
(d) If requested by the Bank, within 30 days after the end of each month (including the last month in each fiscal quarter and in each fiscal year), monthly financial statements of the Borrower, which shall include a balance sheet, profit and loss statement and statement of cash flow. The profit and loss statement and the statement of cash flow to be submitted under this subsection shall be presented on a monthly and a year-to-date basis, and the financial statements to be submitted under this subsection shall include comparisons with the same period for the prior year. These financial statements may be company-prepared. Such financial statements shall be dated and certified by the chief executive or chief financial officer of the Borrower and accompanied by a compliance certificate setting forth (i) the information and computations (in sufficient detail) to establish that the Borrower is in compliance with all financial covenants at the end of the period covered by the financial statements then being furnished and (ii) whether there existed as of the date of such financial statements, and whether there exists as of the date of the certificate, any default under this Agreement and, if any such default exists, specifying the nature thereof and the action the Borrower is taking and proposes to take with respect thereto. The compliance certificate shall be substantially in the form attached hereto as Exhibit A.
(e) Within 10 days of receipt or dispatch by the Borrower, copies of any management letters and correspondence relating to management letters sent or received by the Borrower to or from the Borrower's auditor. If no management letter is prepared, the Bank may, in its discretion, request a letter from such auditor stating that no deficiencies were noted that would otherwise be addressed in a management letter.
(f) Such additional financial information regarding the Borrower, CET and any guarantor, accommodation party, pledgor, grantor or other obligor with respect to the Facilities (each such guarantor, accommodation party, pledgor, grantor or other obligor being sometimes herein referred to as an "Obligor") as the Bank shall request.

### 8.3 Leverage Ratio.

To maintain on a consolidated basis a ratio of Funded Debt to EBITDA ("Leverage Ratio") not exceeding the applicable Leverage Ratio Requirement, calculated as of the end of each quarter-annual reporting period for which the Bank requires financial statements, using the results of the twelve-month period ending with the end of that reporting period.

For purposes of this covenant:
"Funded Debt" means all outstanding liabilities for borrowed money and other interest-bearing liabilities, including current and long term debt, capital lease obligations, promissory notes, seller notes, letters of credit, if any, and any obligations guaranteed by the Borrower.
"EBITDA" means net income before non-cash extraordinary losses and extraordinary gains, minus income or plus loss from discontinued operations, plus interest expense, income taxes, depreciation and amortization expense, plus non-cash charges for equity-based compensation expense. EBITDA will be calculated for the twelve-month period ending with the end of each reporting period.
"Leverage Ratio Requirement" means 1.50 to 1.00 ; provided, however, that for any calculation date occurring after the Borrower has recorded EBITDA of at least $\$ 15,000,000$ for each of the twelve-month periods ending at the end of two consecutive fiscal quarters of the Borrower, the Leverage Ratio Requirement shall be 2.00 to 1.00 .

### 8.4 Interest Coverage Ratio.

To maintain on a consolidated basis an Interest Coverage Ratio of at least 1.50 to 1.00, calculated as of the end of each quarter-annual reporting period for which the Bank requires financial statements, using the results of the twelve-month period ending with the end of that reporting period. For purposes of this covenant:
"Interest Coverage Ratio" means the ratio of (a) EBITDAR minus maintenance capital expenditures in the amount of $\$ 50,000$ per annum, minus cash income taxes, minus Restricted Payments (excluding Restricted Payments permitted by paragraph (d) of Section 8.8), to (b) the sum (without duplication) of interest expense (including the interest component of any capitalized lease obligations), lease expense and rent expense.
"EBITDAR" means the sum of EBITDA plus, without duplication, lease expense and rent expense. EBITDAR will be calculated for the twelve-month period ending with the end of each reporting period.

## 8.5 [Reserved.]

### 8.6 Capital Expenditures.

Not to make or incur capital expenditures (excluding capital lease obligations) in an aggregate amount in excess of $\$ 2,000,000$ during any fiscal year.

### 8.7 Lease Expenditures.

Not to incur obligations for operating leases of real or personal property requiring payments in an aggregate amount in excess of $\$ 2,000,000$ during any fiscal year.

### 8.8 Restricted Payments.

Not to declare, make or pay, or to permit any Subsidiary to declare, make or pay, any dividend or other distribution (whether in cash, securities or other property) with respect to any capital stock or other equity interest of the Borrower or any Subsidiary, or any payment (whether in cash, securities or other property), including any sinking fund or similar deposit, on account of the acquisition, purchase, redemption, retirement, cancellation or termination of any such capital stock or other equity interest or of any option, warrant or other right to acquire any such capital stock or other equity interest ("Restricted Payments") except:
(a) each Subsidiary may make Restricted Payments to the Borrower and to wholly-owned Subsidiaries (and, in the case of a Restricted Payment by a non-wholly-owned Subsidiary, to the Borrower and any Subsidiary and to each other owner of capital stock or other equity interests of such Subsidiary on a pro rata basis based on their relative ownership interests);
(b) the Borrower may declare and make dividend payments or other distributions payable solely in the common stock or other common equity interests of the Borrower;
(c) the Borrower and each Subsidiary may purchase, redeem or otherwise acquire shares of its common stock or other common equity interests or warrants or options to acquire any such shares with the proceeds received from the substantially concurrent issue of new shares of its common stock or other common equity interests; and
(d) the Borrower may purchase, redeem or otherwise acquire shares of its capital stock for cash in an aggregate amount not to exceed $\$ 10,000,000$ subsequent to the date of this Agreement; provided that
(i) any such purchases, redemptions or other acquisitions of shares shall be made using only the Borrower's cash on hand (other than proceeds of the Facility No. 1 Commitment), and
(ii) such purchases, redemptions and other acquisitions of shares in each case shall be made only if, after giving effect thereto, Borrower's Cash Equivalents would exceed the aggregate Funded Debt of the Borrower and its Subsidiaries on a consolidated basis then outstanding.

As used herein, "Cash Equivalents" means, as at any date, (1) securities issued or directly and fully guaranteed or insured by the United States or any agency or instrumentality thereof (provided that the full faith and credit of the United States is pledged in support thereof) having maturities of not more than twelve months from the date of acquisition, (2) U.S. Dollardenominated time deposits and certificates of deposit of $(A)$ the Bank, (B) any domestic commercial bank of recognized standing having capital and surplus in excess of $\$ 500$ million or (C) any bank whose short-term commercial paper rating from Standard \& Poor's Ratings Services, a Standard \& Poor's Financial Services LLC business, or its successor ("S\&P") is at least A-1 or the equivalent thereof or from Moody's Investors Service, Inc. or its successor ("Moody's") is at least P-1 or the equivalent thereof (any such bank being an "Approved Bank"), in each case with maturities of not more than 270 days from the date of acquisition, (3) commercial paper and variable or fixed rate notes issued by any Approved Bank (or by the parent company thereof) or any variable rate notes issued by, or guaranteed by, any domestic corporation rated A-1 (or the equivalent thereof) or better by S\&P or P-1 (or the equivalent thereof) or better by Moody's and maturing within six months of the date of acquisition, (4) repurchase agreements entered into by the Borrower with a bank or trust company (including the Bank) or recognized securities dealer having capital and surplus in excess of $\$ 500$ million for direct obligations issued by or fully guaranteed by the United States in which the Borrower shall have a perfected first priority security interest (subject to no other liens) and having, on the date of purchase thereof, a fair market value of at least $100 \%$ of the amount of the repurchase obligations and (5) investments, classified in accordance with GAAP as current assets, in money market investment programs registered under the Investment Company Act of 1940 that are administered by reputable financial institutions having capital of at least $\$ 500$ million and the portfolios of which are limited to Investments of the character described in the foregoing clauses (1) through (4).

### 8.9 Bank as Principal Depository.

To maintain, and to cause each of its Subsidiaries to maintain, the Bank or one of its affiliates as its principal depository bank, including for the maintenance of business, cash management, operating, administrative and treasury management accounts

### 8.10 Other Debts.

Not to have, or permit its Subsidiaries to have, outstanding or incur any direct or contingent liabilities or lease obligations (other than those to the Bank), or become liable for the liabilities of others, without the Bank's written consent. This does not prohibit:
(a) Acquiring services, goods, supplies or merchandise on normal trade terms, including by invoice or by accrual in accordance with GAAP.
(b) Endorsing negotiable instruments received in the usual course of business.
(c) Obtaining surety bonds in the usual course of business.
(d) Liabilities, lines of credit and leases in existence on the date of this Agreement and disclosed in Schedule 8.10.
(e) Purchase money debt and capitalized lease obligations financed by the Borrower through specific research grants to the Borrower for the development of pharmaceutical products in connection with such obligations, and other purchase money debt and capitalized lease obligations in an aggregate principal amount not exceeding \$250,000 outstanding at any one time.
(f) The indebtedness evidenced by the CET Pledged Note.
(g) Other indebtedness in an aggregate amount not to exceed \$500,000 outstanding at any one time.

### 8.11 Other Liens.

Not to create, assume, or allow any security interest or lien (including judicial liens) on property the Borrower or any Subsidiary now or hereafter owns, except:
(a) Liens and security interests in favor of the Bank.
(b) Liens for taxes not yet due.
(c) Liens in existence on the date of this Agreement and disclosed in Schedule 8.11.
(d) Liens securing purchase money debt or indebtedness arising under capitalized lease obligations permitted by this Agreement; provided, however, that in each case any such liens shall attach only to the specific item(s) of property or asset(s) financed with such purchase money debt or capitalized lease.
(e) Liens on property of CET pursuant to the CET Security Agreement.

### 8.12 Maintenance of Assets.

Not to sell, assign, lease, transfer or otherwise dispose of, or permit any Subsidiary to sell, assign, lease, transfer or otherwise dispose of, any part of the Borrower's or such Subsidiary's business or the Borrower's or such Subsidiary's assets except in the ordinary course of business of the Borrower and its Subsidiaries.

### 8.13 Investments.

Not to have or permit any Subsidiary to have any existing, or make or permit any Subsidiary to make any new, investments in any individual or entity, or make or permit any Subsidiary to make any capital contributions or other transfers of assets to any individual or entity, except for:
(a) Existing investments in CET (other than advances to CET described in subsection 8.14(c)), and CPSC disclosed to the Bank in writing.
(b) Investments permitted by Section 8.14.
(c) Cash Equivalents.
8.14 Loans.

Not to make any loans, advances or other extensions of credit to any individual or entity, except for:
(a) Extensions of credit in existence on the date of this Agreement and disclosed in Schedule 8.14.
(b) Extensions of credit in the nature of accounts receivable or notes receivable arising from the sale or lease of goods or services in the ordinary course of business to non-affiliated entities.
(c) Extensions of credit to CET in an aggregate amount not exceeding \$1,500,000 outstanding at any one time, provided that (i) extensions of credit by the Borrower to CET from the Facility No. 1 Commitment shall not exceed $\$ 500,000$ outstanding at any one time and (ii) such extensions of credit are evidenced by the CET Pledged Note and secured by the CET Security Agreement.
(d) Advances to employees for business travel and other expenses incurred in the ordinary course of business in an aggregate amount not exceeding $\$ 100,000$ outstanding at any one time.

### 8.15 Additional Negative Covenants.

Not to, without the Bank's written consent:
(a) Enter into any consolidation, merger, or other combination, or become a partner in a partnership, a member of a joint venture, or a member of a limited liability company other than CET.
(b) Acquire or purchase a business or line of business or substantially all of the assets of a business or line of business.
(c) Change the general character of the business of the Borrower as conducted on the date of this Agreement or engage in any business activities substantially different from the Borrower's present business.
(d) Liquidate or dissolve the Borrower's business.

### 8.16 Notices to Bank.

To promptly notify the Bank in writing of:
(a) Any lawsuit against the Borrower or any Subsidiary.
(b) Any substantial dispute between any governmental authority on one hand and the Borrower or any Subsidiary on the other hand.
(c) Any event of default under this Agreement, or any event that, with notice or lapse of time or both, would constitute an event of default.
(d) Any material adverse change in the Borrower's or any Subsidiary's business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit.
(e) Any change in the Borrower's or any Subsidiary's name, legal structure, place of business, or chief executive office if the Borrower or such Subsidiary has more than one place of business.
(f) Any uninsured or partially uninsured loss of property of the Borrower or any Subsidiary through fire, theft, liability or property damage in excess of $\$ 25,000$.
8.17 Insurance.
(a) General Business Insurance. To maintain insurance satisfactory to the Bank as to amount, nature and carrier including property damage insurance (including loss of use and occupancy) with respect to the Borrower's or any Subsidiary's properties, business interruption insurance, public liability insurance including coverage for contractual liability, product liability and workers' compensation, and any other insurance that is usual for the Borrower's business. Each policy shall provide for at least thirty (30) days' prior notice to the Bank of any cancellation thereof.
(b) Insurance Covering_Collateral. To maintain all-risk property damage insurance policies covering the tangible property comprising the Collateral. Each insurance policy must be in an amount acceptable to the Bank. The insurance must be issued by an insurance company acceptable to the Bank and must include a lender's loss payable endorsement in favor of the Bank in a form acceptable to the Bank.
(c) Evidence of Insurance. Upon the request of the Bank, to deliver to the Bank a copy of each insurance policy, or, if permitted by the Bank, a certificate of insurance listing all insurance in force and demonstrating compliance with the applicable provisions of this Section.

### 8.18 Compliance with Laws.

To comply with the laws (including any fictitious or trade name statute), regulations, and orders of any government body with authority over the Borrower's business. The Bank shall have no obligation to make any advance to the Borrower except in compliance with all applicable laws and regulations and the Borrower shall fully cooperate with the Bank in complying with all such applicable laws and regulations.

### 8.19 ERISA Plans.

Promptly during each year, to pay and cause any subsidiaries to pay contributions adequate to meet at least the minimum funding standards under ERISA with respect to each and every Plan; file each annual report required to be filed pursuant to ERISA in connection with each Plan for each year; and notify the Bank within ten (10) days of the occurrence of any Reportable Event that might constitute grounds for termination of any capital Plan by the Pension Benefit Guaranty Corporation or for the appointment by the appropriate United States District Court of a trustee to administer any Plan. "ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time. Capitalized terms in this paragraph shall have the meanings defined within ERISA.

### 8.20 Books and Records.

To maintain adequate books and records.

### 8.21 Visits, Inspections and Audits.

To allow the Bank and its agents to visit and inspect the properties of the Borrower and its Subsidiaries and examine, audit and make copies of books and records at any reasonable time. If any of the properties, books or records of Borrower or a Subsidiary is in the possession of a third party, the Borrower authorizes that third party to permit the Bank or its agents to have access to perform inspections or audits and to respond to the Bank's requests for information concerning such properties, books and records.

### 8.22 Perfection of Liens.

To help the Bank perfect and protect its security interests and liens, and reimburse it for related costs it incurs to protect its security interests and liens.

### 8.23 Cooperation.

To take, and cause its Subsidiaries to take, any action reasonably requested by the Bank to carry out the intent of this Agreement.

### 8.24 Collateral Account Notification and Acknowledgement.

To deliver to the Bank a signed original Collateral Account Notification and Acknowledgement Agreement covering the Collateral in the account(s) described therein, in form and substance acceptable to the Bank in its sole discretion, within a reasonable time following Bank's request.

### 8.25 Subsidiaries.

Promptly (a) to cause any person that becomes a Subsidiary of the Borrower to become a guarantor of the Facilities and to grant liens and security interests on its assets to secure the Facilities by executing and delivering to the Bank such documents, instruments, agreements and certificates as the Bank shall deem appropriate for such purposes and (b) to take such actions and execute and deliver, or cause to be executed and delivered, such documents, instruments, agreements, certificates and opinions as are necessary to confirm to the satisfaction of the Bank and its legal counsel that such guaranty is valid and enforceable and that the security interests of the Bank in the Collateral of such Subsidiary are valid and enforceable first-priority perfected security interests. The provisions of this Section shall not apply to CET unless and until CET becomes a direct or indirect wholly-owned Subsidiary of the Borrower.

## 9. HAZARDOUS SUBSTANCES

### 9.1 Indemnity Regarding Hazardous Substances.

The Borrower will indemnify and hold harmless the Bank from any loss or liability the Bank incurs in connection with or as a result of this Agreement, that directly or indirectly arises out of the use, generation, manufacture, production, storage, release, threatened release, discharge, disposal or presence of a hazardous substance. This indemnity will apply whether the hazardous substance is on, under or about the Borrower's property or operations or property leased to the Borrower. The indemnity includes attorneys' fees (including the reasonable estimate of the allocated cost of in-house counsel and staff). The indemnity extends to the Bank, its parent, subsidiaries and all of their directors, officers, employees, agents, successors, attorneys and assigns.

### 9.2 Compliance Regarding Hazardous Substances.

The Borrower represents and warrants that the Borrower and its Subsidiaries have complied with all current and future laws, regulations and ordinances or other requirements of any governmental authority relating to or imposing liability or standards of conduct concerning protection of health or the environment or hazardous substances.

### 9.3 Notices Regarding Hazardous Substances.

Until full repayment of the loans made pursuant to this Agreement, the Borrower will promptly notify the Bank in writing of any threatened or pending investigation of the Borrower or any of its Subsidiaries or any of their respective properties or operations by any governmental agency under any current or future law, regulation or ordinance pertaining to any hazardous substance.

### 9.4 Site Visits, Observations and Testing.

The Bank and its agents and representatives will have the right at any reasonable time, after giving reasonable notice to the Borrower, to enter and visit any locations where any Collateral is located for the purposes of observing the Collateral, taking and removing environmental samples, and conducting tests. The Borrower shall reimburse the Bank on demand for the costs of any such environmental investigation and testing. The Bank will make reasonable efforts during any site visit, observation or testing conducted pursuant this paragraph to avoid interfering with the Borrower's use of the Collateral. The Bank is under no duty to observe the Collateral or to conduct tests, and any such acts by the Bank will be solely for the purposes of protecting the Bank's security and preserving the Bank's rights under this Agreement. No site visit, observation or testing or any report or findings made as a result thereof ("Environmental Report") (i) will result in a waiver of any default of the Borrower; (ii) impose any liability on the Bank; or (iii) be a representation or warranty of any kind regarding the Collateral (including its condition or value or compliance with any laws) or the Environmental Report (including its accuracy or completeness). In the event the Bank has a duty or obligation under applicable laws, regulations or other requirements to disclose an Environmental Report to the Borrower or any other party, the Borrower authorizes the Bank to make such a disclosure. The Bank may also disclose an Environmental Report to any regulatory authority, and to any other parties as necessary or appropriate in the Bank's judgment. The Borrower further understands and agrees that any Environmental Report or other information regarding a site visit, observation or testing that is disclosed to the Borrower by the Bank or its agents and representatives is to be evaluated (including any reporting or other disclosure obligations of the Borrower) by the Borrower without advice or assistance from the Bank.

### 9.5 Definition of Hazardous Substances.

"Hazardous substances" means any substance, material or waste that is or becomes designated or regulated as "toxic," "hazardous," "pollutant," or "contaminant" or a similar designation or regulation under any current or future federal, state or local law (whether under common law, statute, regulation or otherwise) or judicial or administrative interpretation of such, including petroleum or natural gas.

### 9.6 Continuing Obligation.

The Borrower's obligations to the Bank under this Article, except the obligation to give notices to the Bank, shall survive termination of this Agreement and repayment of the Borrower's obligations to the Bank under this Agreement.

## 10. DEFAULT AND REMEDIES

If any of the following events of default occurs, the Bank may do one or more of the following: declare the Borrower in default, terminate the Facility No. 1 Commitment and the Facility No. 2 Commitment, stop making any additional credit available to the Borrower, and require the Borrower to repay its entire debt immediately and without prior notice. If an event that, with notice or the passage of time, will constitute an event of default has occurred and is continuing, the Bank has no obligation to make advances or extend additional credit under this Agreement. In addition, if any event of default occurs, the Bank shall have all rights, powers and remedies available under any instruments and agreements required by or executed in connection with this Agreement, as well as all rights and remedies available at law or in equity. If an event of default occurs under the paragraph entitled "Bankruptcy," below, with respect to the Borrower or any of its Subsidiaries, then the entire debt outstanding under this Agreement will automatically be due immediately.
10.1 Failure to Pay.

The Borrower fails to make a payment under this Agreement when due, provided, however, that such failure shall not constitute an event of default hereunder if no other default or event of default has occurred and is continuing and such payment is received by the Bank within three (3) days of the date such payment was due.

### 10.2 Other Bank Agreements.

Any other default occurs under any other Loan Document or any other agreement the Borrower or any Obligor or any of the Borrower's related entities or affiliates (including CET) has with the Bank or any affiliate of the Bank.

### 10.3 Cross-Default.

Any default occurs under any agreement in connection with any credit (the aggregate outstanding amount of which credit is in excess of $\$ 500,000$ ) (i) the Borrower (or any Obligor) or any of the Borrower's related entities or affiliates has obtained from anyone else or (ii) that the Borrower (or any Obligor) or any of the Borrower's related entities or affiliates has guaranteed, provided, however, that in the event that such default occurs in connection with payment of sums due under the distribution agreement relating to the Borrower's purchase of exclusive rights to distribute Kristalose ${ }^{\circledR}$ in North America, such default shall not be a cross-default so long as (i) such payment is being contested in good faith and by appropriate proceedings, for which adequate reserves in accordance with GAAP have been established on the books of such Borrower and (ii) such refusal to pay could not reasonably be expected to result in the termination of or the loss of any material rights under the distribution agreement.

### 10.4 False Information.

The Borrower or any Obligor has given the Bank materially false or misleading information or representations.

### 10.5 Bankruptcy.

The Borrower, any Subsidiary, any Obligor or any general partner of the Borrower or of any Obligor files a bankruptcy petition, or a bankruptcy petition is filed against any of the foregoing parties, or the Borrower, any Subsidiary, any Obligor or any general partner of the Borrower or of any Obligor makes a general assignment for the benefit of creditors.

### 10.6 Receivers.

A receiver or similar official is appointed for a substantial portion of the Borrower's or any Subsidiary's or Obligor's business, or the business is terminated, or, if any Subsidiary or Obligor is anything other than a natural person, such Subsidiary or Obligor is liquidated or dissolved.

### 10.7 Lien Priority.

The Bank fails to have an enforceable first lien (except for any prior liens to which the Bank has consented in writing) on or security interest in any property given as security for this Agreement.
10.8 Lawsuits.

Any lawsuit or lawsuits are filed on behalf of one or more trade creditors against the Borrower or any Subsidiary or Obligor in excess of any insurance coverage.

### 10.9 Judgments.

Any judgments or arbitration awards are entered against the Borrower, any Subsidiary or any Obligor, or the Borrower, any Subsidiary or any Obligor enters into any settlement agreements with respect to any litigation or arbitration, in excess of any insurance coverage.

### 10.10 [Reserved.]

### 10.11 Material Adverse Change.

A material adverse change occurs, or is reasonably likely to occur, in the Borrower's, any Subsidiary's or any Obligor's business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit; or the Bank determines that it is insecure for any other reason.
10.12 Government Action

Any government authority takes action that the Bank believes materially adversely affects the Borrower's, any Subsidiary's or any Obligor's financial condition or ability to repay.

### 10.13 Default Under Related Documents

Any default occurs under any subordination agreement, security agreement, deed of trust, mortgage, the CET Pledged Note, the CET Security Agreement or any other document required by or delivered in connection with this Agreement or any such document is no longer in effect
10.14 Other Breach Under Agreement.

A default occurs under any other term or condition of this Agreement not specifically referred to in this Article. This includes any failure by the Borrower (or any other party named in the Covenants section) to comply with any financial covenants set forth in this Agreement, whether such failure is evidenced by financial statements delivered to the Bank or is otherwise known to the Borrower or the Bank.
10.15 Change in Control.

Either:
(a) Any individual, entity or group (as defined in Section 13(d) of the Securities Exchange Act of 1934) shall obtain beneficial ownership (within the meaning of Rule 13d-3 of the Securities and Exchange Commission under the Securities Exchange Act of 1934) or control, directly or indirectly, in one or a series of transactions, of more than thirty $(30 \%)$ of the common or other voting stock or thirty (30\%) of the voting power of the Borrower entitled to vote in the election of members of the board of directors of the Borrower; or
(b) during any period of 24 consecutive months commencing on or after the date of this Agreement, individuals who at the beginning of such 24-month period were directors of the Borrower shall cease for any reason (other than due to death or disability) to constitute a majority of the board of directors of the Borrower (except to the extent that individuals who at the beginning of such 24 -month period were replaced by individuals (i) elected by a majority of the remaining members of the board of directors of the Borrower or (ii) nominated for election by, or whose election is recommended by, a majority of the remaining members of the board of directors of the Borrower and thereafter elected as directors by the shareholders of the Borrower).

## 11. ENFORCING THIS AGREEMENT; MISCELLANEOUS

### 11.1 GAAP.

Except as otherwise stated in this Agreement, all financial and accounting terms are used, all financial information provided to the Bank will be prepared and all financial covenants will be calculated in accordance with under generally accepted accounting principles consistently applied.

### 11.2 Tennessee Law

This Agreement is governed by Tennessee law.

### 11.3 Successors and Assigns.

This Agreement is binding on the Borrower's and the Bank's successors and assignees. The Borrower agrees that it may not assign this Agreement without the Bank's prior consent. The Bank may sell participations in or assign this loan, and may exchange information about the Borrower (including any information regarding any hazardous substances) with actual or potential participants or assignees. If a participation is sold or the loan is assigned, the purchaser will have the right of set-off against the Borrower.

### 11.4 Interest and Loan Charges Not to Exceed Maximum Amounts Allowed by Law.

Anything in this Agreement or any of the other Loan Documents to the contrary notwithstanding, in no event whatsoever, whether by reason of advancement of proceeds of the loans hereunder, acceleration of the maturity of the unpaid balance of such loans or otherwise, shall the interest and loan charges agreed to be paid to the Bank for the use of the money advanced or to be advanced hereunder exceed the maximum amounts collectible under applicable laws in effect from time to time. It is understood and agreed by the parties that, if for any reason whatsoever the interest or loan charges paid or contracted to be paid by the Borrower in respect of the loans made hereunder shall exceed the maximum amounts collectible under applicable laws in effect from time to time, then ipso facto, the obligation to pay such interest or loan charges shall be reduced to the maximum amounts collectible under applicable laws in effect from time to time, and any amounts collected by the Bank that exceed such maximum amounts shall be applied to the reduction of the principal balance of the loans or refunded to the Borrower so that at no time shall the interest or loan charges paid or payable in respect of the loans hereunder exceed the maximum amounts permitted from time to time by applicable law.

### 11.5 Arbitration and Waiver of Jury Trial.

(a) This paragraph concerns the resolution of any controversies or claims between the parties, whether arising in contract, tort or by statute, including controversies or claims that arise out of or relate to: (i) this agreement (including any renewals, extensions or modifications); or (ii) any document related to this agreement (collectively a "Claim"). For the purposes of this arbitration provision only, the term "parties" shall include any parent corporation, subsidiary or affiliate of the Bank involved in the servicing, management or administration of any obligation described or evidenced by this agreement.
(b) At the request of any party to this agreement, any Claim shall be resolved by binding arbitration in accordance with the Federal Arbitration Act (Title 9, U.S. Code) (the "Act"). The Act will apply even though this agreement provides that it is governed by the law of a specified state. The arbitration will take place on an individual basis without resort to any form of class action.
(c) Arbitration proceedings will be determined in accordance with the Act, the then-current rules and procedures for the arbitration of financial services disputes of the American Arbitration Association or any successor thereof ("AAA"), and the terms of this paragraph. In the event of any inconsistency, the terms of this paragraph shall control. If AAA is unwilling or unable to (i) serve as the provider of arbitration or (ii) enforce any provision of this arbitration clause, the Bank may designate another arbitration organization with similar procedures to serve as the provider of arbitration.
(d) The arbitration shall be administered by AAA and conducted, unless otherwise required by law, in any U.S. state where real or tangible personal property Collateral for this credit is located or if there is no such Collateral, in the state specified in the governing law section of this agreement. All Claims shall be determined by one arbitrator; however, if Claims exceed Five Million Dollars ( $\$ 5,000,000$ ), upon the request of any party, the Claims shall be decided by three arbitrators. All arbitration hearings shall commence within ninety (90) days of the demand for arbitration and close within ninety (90) days of commencement and the award of the arbitrator(s) shall be issued within thirty (30) days of the close of the hearing. However, the arbitrator(s), upon a showing of good cause, may extend the commencement of the hearing for up to an additional sixty (60) days. The arbitrator(s) shall provide a concise written statement of reasons for the award. The arbitration award may be submitted to any court having jurisdiction to be confirmed, judgment entered and enforced.
(e) The arbitrator(s) will give effect to statutes of limitation in determining any Claim and may dismiss the arbitration on the basis that the Claim is barred. For purposes of the application of the statute of limitations, the service on AAA under applicable AAA rules of a notice of Claim is the equivalent of the filing of a lawsuit. Any dispute concerning this arbitration provision or whether a Claim is arbitrable shall be determined by the arbitrator(s). The arbitrator(s) shall have the power to award legal fees pursuant to the terms of this agreement.
(f) This paragraph does not limit the right of any party to: (i) exercise self-help remedies, such as but not limited to, setoff; (ii) initiate judicial or non-judicial foreclosure against any real or personal property Collateral; (iii) exercise any judicial or power of sale rights, or (iv) act in a court of law to obtain an interim remedy, such as but not limited to, injunctive relief, writ of possession or appointment of a receiver, or additional or supplementary remedies.
(g) The filing of a court action is not intended to constitute a waiver of the right of any party, including the suing party, thereafter to require submittal of the Claim to arbitration.
(h) By agreeing to binding arbitration, the parties irrevocably and voluntarily waive any right they may have to a trial by jury in respect of any Claim. Furthermore, without intending in any way to limit this agreement to arbitrate, to the extent any Claim is not arbitrated, the parties irrevocably and voluntarily waive any right they may have to a trial by jury in respect of such Claim. This provision is a material inducement for the parties entering into this agreement.

### 11.6 Severability; Waivers.

If any part of this Agreement is not enforceable, the rest of this Agreement may be enforced. The Bank retains all rights, even if it makes a loan after default. If the Bank waives a default, it may enforce a later default. Any consent or waiver under this Agreement must be in writing.

### 11.7 Costs and Attorneys' Fees.

The Borrower shall reimburse the Bank for any reasonable costs and attorneys' fees incurred by the Bank in connection with the enforcement or preservation of any rights or remedies under this Agreement and any other documents executed in connection with this Agreement, and in connection with any amendment, waiver, "workout" or restructuring under this Agreement. In the event of a lawsuit or arbitration proceeding, the prevailing party is entitled to recover costs and reasonable attorneys' fees incurred in connection with the lawsuit or arbitration proceeding, as determined by the court or arbitrator. In the event that any case is commenced by or against the Borrower under the Bankruptcy Code (Title 11, United States Code) or any similar or successor statute, the Bank is entitled to recover costs and reasonable attorneys' fees incurred by the Bank related to the preservation, protection, or enforcement of any rights of the Bank in such a case. As used in this paragraph, "attorneys' fees" includes the allocated costs of the Bank's in-house counsel.

### 11.8 Individual Liability.

If the Borrower is a natural person, the Bank may proceed against the Borrower's business and non-business property in enforcing this and other agreements relating to this loan. If the Borrower is a partnership, the Bank may proceed against the business and non-business property of each general partner of the Borrower in enforcing this and other agreements relating to this loan.

### 11.9 One Agreement.

This Agreement, the Loan Documents and any related security or other agreements required by this Agreement, collectively:
(a) represent the sum of the understandings and agreements between the Bank and the Borrower concerning this credit;
(b) replace any prior oral or written agreements between the Bank and the Borrower concerning this credit; and
(c) are intended by the Bank and the Borrower as the final, complete and exclusive statement of the terms agreed to by them.

In the event of any conflict between this Agreement and any other agreements required by this Agreement, this Agreement will prevail. Any reference in any related document to a "promissory note" or a "note" executed by the Borrower and dated as of the date of this Agreement shall be deemed to refer to this Agreement and any promissory note(s) that may be executed as additional evidence of the debt hereunder, all as now in effect or as hereafter amended, modified, extended, renewed or restated.

### 11.10 Indemnification.

The Borrower will indemnify and hold the Bank harmless from any loss, liability, damages, judgments, and costs of any kind relating to or arising directly or indirectly out of (a) this Agreement or any document required hereunder, (b) any credit extended or committed by the Bank to the Borrower hereunder, and (c) any litigation or proceeding related to or arising out of this Agreement, any such document, or any such credit; provided that such indemnity shall not, as to any indemnitee, be available to the extent that such loss, liability, damages, judgment or related cost is determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted from the gross negligence or willful misconduct of such indemnitee. This indemnity includes attorneys' fees (including the allocated cost of in-house counsel). This indemnity extends to the Bank, its parent, subsidiaries and all of their directors, officers, employees, agents, successors, attorneys, and assigns. This indemnity will survive repayment of the Borrower's obligations to the Bank. All sums due to the Bank hereunder shall be obligations of the Borrower, due and payable immediately without demand.

### 11.11 Notices.

Unless otherwise provided in this Agreement or in another agreement between the Bank and the Borrower, all notices required under this Agreement shall be personally delivered or sent by first class mail, postage prepaid, or by overnight courier, to the addresses on the signature page of this Agreement, or sent by facsimile to the fax numbers listed on the signature page, or to such other addresses as the Bank and the Borrower may specify from time to time in writing. Notices and other communications shall be effective (i) if mailed, upon the earlier of receipt or five (5) days after deposit in the U.S. mail, first class, postage prepaid, (ii) if telecopied, when transmitted, or (iii) if hand-delivered, by courier or otherwise (including telegram, lettergram or mailgram), when delivered.

### 11.12 Headings; Terminology, Etc.

Article and paragraph headings are for reference only and shall not affect the interpretation or meaning of any provisions of this Agreement. The use of defined terms herein is for convenience of reference and shall not be deemed to be limiting or to have any other substantive effect with respect to the persons or things to which reference is made through the use of such defined terms. When used herein, (a) the singular shall include the plural, and vice versa, and the use of the masculine, feminine or neuter gender shall include all other genders, as appropriate, (b) "include", "includes" and "including" shall be deemed to be followed by "without limitation" regardless of whether such words or words of like import in fact follow same, and (c) unless the context clearly indicates otherwise, the disjunctive "or" shall include the conjunctive "and".
11.13 Counterparts.

This Agreement may be executed in as many counterparts as necessary or convenient, and by the different parties on separate counterparts each of which, when so executed, shall be deemed an original but all such counterparts shall constitute but one and the same agreement.
11.14 Existing Loan Agreement and Existing Loan Documents.

This Agreement amends, restates, supersedes and replaces the Existing Loan Agreement, and upon the effectiveness hereof any credit outstanding thereunder shall be deemed to be outstanding under this Agreement. Except as amended or amended and restated pursuant to this Agreement, the Existing Loan Documents shall continue in full force and effect in all respects. References in any of the Existing Loan Documents to the Existing Loan Agreement, by whatever terminology used, hereafter shall be deemed to be references to this Agreement as the same may be supplemented, amended, restated, extended, renewed, replaced or otherwise modified from time to time.
[This space left blank intentionally; signature page follows]

This Agreement is executed as of the date stated at the top of the first page.

## BANK OF AMERICA, N.A.

By /s/ Suzanne B. Smith Name Suzanne B. Smith
Title Senior Vice President
Address where notices to the Bank are to be sent:
Bank of America, N.A.
Bank of America Plaza
414 Union Street
Nashville, TN 37219-1697
Attn: Healthcare Banking Group (TN1-100-04-17)
Facsimile No. (615) 749-4951

## CONSENTED TO AND APPROVED:

CUMBERLAND PHARMA SALES CORP.
By /s/ Jean W. Marstiller
Name Jean W. Marstiller
Title Corporate Secretary
ACKNOWLEDGED:

CUMBERLAND EMERGING TECHNOLOGIES, INC.
By /s/ Jean W. Marstiller
Name Jean W. Marstiller
Title Corporate Secretary

## CUMBERLAND PHARMACEUTICALS INC.

By Is/ Jean W. Marstiller
Name Jean W. Marstiller
Title Senior Vice President and Corporate Secretary
Address where notices to the Borrower are to be sent:
Cumberland Pharmaceuticals Inc.
2525 West End Avenue, Suite 950
Nashville, Tennessee 37203
Attn: A.J. Kazimi, Chief Executive Officer
Facsimile No. (615) 255-0094

## Schedule 1

## Existing Loan Documents

1. Eighth Amended and Restated Promissory Note dated September 29, 2010, in the principal amount not exceeding $\$ 6,000,000$, made and executed by the Borrower and payable to the order of the Bank.
2. Second Amended and Restated Term Promissory Note dated July 22, 2009, in the principal amount of $\$ 18,000,000$, made and executed by the Borrower and payable to the order of the Bank.
3. Amended and Restated Security Agreement dated April 6, 2006, between the Borrower and the Bank, as amended by First Amendment to Security Agreement dated December 30, 2008, between the Borrower and the Bank, and as further amended by Second Amendment to Security Agreement dated July 22, 2009, between the Borrower and the Bank.
4. Trademark and Patent Security Agreement dated April 19, 2002, between the Borrower and the Bank, as amended by First Amendment to Trademark and Patent Security Agreement dated August 1, 2002, as further amended by Second Amendment to Trademark and Patent Security Agreement dated April 6, 2006, as further amended by Third Amendment to Trademark and Patent Security Agreement dated December 30, 2006, as further amended by Fourth Amendment to Trademark and Patent Security Agreement dated July 22, 2009, and as further amended by Fifth Amendment to Trademark and Patent Security Agreement dated September 29, 2010, all between the Borrower and the Bank.
5. Pledge Agreement dated July 22, 2009, between the Borrower and the Bank.
6. Guaranty dated January 21, 2009, executed in favor of the Bank by CPSC.
7. Security Agreement dated January 21, 2009, between CPSC and the Bank.

## Schedule 8.10

## Liabilities

The Borrower leases office space at 2525 West End Avenue, Nashville, Tennessee. The lease expires in October 2016 and has escalating rent payments ranging from $\$\left[{ }^{* * *}\right]$ per month in 2001 to $\$[* * *]$ per month in 2016.

Schedule 8.11
Liens
None

Schedule 8.14
Loans/Extensions of Credit
None.

## EXHIBIT A

## COMPLIANCE CERTIFICATE

This Compliance Certificate is delivered pursuant to Section 8.2 of that certain Fifth Amended and Restated Loan Agreement dated as of August 2, 2011 (together with all amendments and modifications, if any, from time to time made thereto, the "Loan Agreement"), between Cumberland Pharmaceuticals Inc., a Tennessee corporation (the "Borrower") and Bank of America, N.A (the "Bank"). Unless otherwise defined, terms used herein (including the attachments hereto) have the meanings provided in the Loan Agreement.

The undersigned, being the duly elected, qualified and acting $\qquad$ of the Borrower, on behalf of the Borrower and solely in his or her capacity as an officer of the Borrower, hereby certifies and warrants that:

1. He or she is the $\qquad$ of the Borrower and that, as such, he or she is authorized to execute this certificate on behalf of the Borrower.
2. The financial statements being submitted to the Bank by the Borrower with this Certificate are true and correct as of the date hereof.
3. The Borrower's Leverage Ratio as of the end of the most recent fiscal quarter covered by such financial statements is $\qquad$ to 1.00, calculated as follows:

## [SHOW COMPLIANCE CALCULATION]

4. The Borrower's Interest Coverage Ratio as of the end of the most recent fiscal quarter covered by such financial statements is $\qquad$ to 1.00 , calculated as follows:

## [SHOW COMPLIANCE CALCULATION]

5. The Borrower's capital expenditures from the beginning of the current fiscal year through the end of the most recent [fiscal quarter] [month] covered by such financial statements total \$ $\qquad$ -
6. The Borrower's operating lease expenditures from the beginning of the current fiscal year through the end of the most recent [fiscal quarter] [month] covered by the foregoing financial statements total $\$$ $\qquad$ _.
7. Since the date of the most recent previous Compliance Certificate delivered to the Bank, Restricted Payments in an aggregate amount equal to \$ $\qquad$ have been made pursuant to subsection 8.8(d) of the Loan Agreement. The total amount of Restricted Payments made pursuant to subsection 8.8(d) of the Loan Agreement subsequent to the date of the Loan Agreement is \$ $\qquad$ , and all such Restricted Payments have been made in compliance with the requirements of subsection 8.8(d) of the Loan Agreement.
8. As of the date of such financial statements and for the period(s) covered thereby, and as of the date of this certificate, no default was or is in existence under this Agreement[.] [except as described below. The actions the Borrower is taking or proposes to take with respect to such default(s) are set forth below.]
[Signature page follows.]
$\qquad$ day of , 20_.

CUMBERLAND PHARMACEUTICALS INC.

By
Typed Name
Title $\qquad$
9723373.3

## CERTIFICATION OF CHIEF EXECUTIVE AND PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

## I, A.J. Kazimi, certify that:

1. I have reviewed this Form $10-\mathrm{K}$ of Cumberland Pharmaceuticals 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
(c) 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
(d) 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.

August 8, 2011
By: /s/ A.J. Kazimi
A.J. Kazimi

Chief Executive Officer

## CERTIFICATION OF CHIEF EXECUTIVE AND <br> PRINCIPAL FINANCIAL OFFICER <br> PURSUANT TO 18 U.S.C. SECTION 1350, <br> AS ADOPTED PURSUANT TO SECTION 906 <br> OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2011 of Cumberland Pharmaceuticals Inc. (the "Company"), as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, A.J. Kazimi, Chief Executive and Principal Financial Officer of the Company, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. section 1350), that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.
/s/ A. J. Kazimi
A.J. Kazimi

Chief Executive and Principal
Financial Officer
August 8, 2011


[^0]:    Exhibit 10.16
    Exhibit 31.1
    Exhibit 32.1
    EX-101 INSTANCE DOCUMENT
    EX-101 SCHEMA DOCUMENT
    EX-101 CALCULATION LINKBASE DOCUMENT
    EX-101 LABELS LINKBASE DOCUMENT
    EX-101 PRESENTATION LINKBASE DOCUMENT
    EX-101 DEFINITION LINKBASE DOCUMENT

