UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

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 September 30, 2017

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission file number: 001-33637

Cumberland Pharmaceuticals Inc.

(Exact Name of Registrant as Specified In Its Charter)

Tennessee	**62-1765329**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
2525 West End Avenue, Suite 950, Nashville, Tennessee	**37203**
(Address of Principal Executive Offices)	**(Zip Code)**

(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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate 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 ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at November 3, 2017
Common stock, no par value	15,748,137

CUMBERLAND PHARMACEUTICALS INC.
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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

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

	September 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 42,018,953	$ 34,510,330
Marketable securities	8,055,017	15,622,111
Accounts receivable, net of allowances	7,205,378	7,330,127
Inventories, net	5,857,468	5,371,729
Other current assets	2,945,999	2,710,967
Total current assets	66,082,815	65,545,264
Property and equipment, net	474,748	464,454
Intangible assets, net	21,540,316	22,154,176
Deferred tax assets, net	—	3,119,930
Other assets	2,253,178	2,120,742
Total assets	$ 90,351,057	$ 93,404,566
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 7,921,600	$ 8,036,611
Other current liabilities	7,876,491	6,755,652
Total current liabilities	15,798,091	14,792,263
Revolving line of credit	8,000,000	4,100,000
Other long-term liabilities	1,634,936	1,391,484
Total liabilities	25,433,027	20,283,747
Commitments and contingencies		
Equity:		
Shareholders' equity:		
Common stock—no par value; 100,000,000 shares authorized; 15,781,736 and 16,074,176 shares issued and outstanding as of September 30, 2017 and December 31, 2016, respectively	52,585,566	54,643,268
Retained earnings	12,509,767	18,604,931
Total shareholders' equity	65,095,333	73,248,199
Noncontrolling interests	(177,303)	(127,380)
Total equity	64,918,030	73,120,819
Total liabilities and equity	$ 90,351,057	$ 93,404,566

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES
Condensed Consolidated Statements of Operations and Comprehensive Income (loss)
(Unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Net revenues	$ 11,196,961	$ 8,791,753	$ 29,500,843	$ 23,944,120
Costs and expenses:				
Cost of products sold	2,166,353	1,973,948	5,216,776	4,353,148
Selling and marketing	6,226,438	3,614,714	16,174,391	10,585,955
Research and development	943,162	644,662	2,921,951	2,029,914
General and administrative	2,090,785	1,865,575	6,554,158	5,817,943
Amortization	609,572	562,722	1,811,589	1,632,920
Total costs and expenses	12,036,310	8,661,621	32,678,865	24,419,880
Operating income (loss)	(839,349)	130,132	(3,178,022)	(475,760)
Interest income	94,833	51,636	216,849	160,248
Interest expense	(8,902)	(29,088)	(70,646)	(77,777)
Income (loss) before income taxes	(753,418)	152,680	(3,031,819)	(393,289)
Income tax (expense) benefit	(3,822)	(57,192)	(4,196,192)	159,282
Net income (loss)	(757,240)	95,488	(7,228,011)	(234,007)
Net loss at subsidiary attributable to noncontrolling interests	14,209	10,678	49,923	39,018
Net income (loss) attributable to common shareholders	$ (743,031)	$ 106,166	$ (7,178,088)	$ (194,989)
Earnings (loss) per share attributable to common shareholders				
- basic	$ (0.05)	$ 0.01	$ (0.45)	$ (0.01)
- diluted	$ (0.05)	$ 0.01	$ (0.45)	$ (0.01)
Weighted-average shares outstanding				
- basic	15,867,159	16,217,442	15,973,737	16,268,579
- diluted	15,867,159	16,504,568	15,973,737	16,268,579
Comprehensive income (loss) attributable to common shareholders	(743,031)	106,166	(7,178,088)	(194,989)
Net loss at subsidiary attributable to noncontrolling interests	14,209	10,678	49,923	39,018
Total comprehensive income (loss)	$ (757,240)	$ 95,488	$ (7,228,011)	$ (234,007)

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

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

	Nine months ended September 30,	
	2017	**2016**
Cash flows from operating activities:		
Net income (loss)	$ (7,228,011)	$ (234,007)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Depreciation and amortization expense	1,974,194	1,785,057
Deferred tax expense	4,293,963	662,689
Share-based compensation	849,198	623,504
Excess tax (benefit) expense derived from exercise of stock options	(91,109)	907,270
Noncash interest expense	60,708	61,224
Noncash investment gains	(48,084)	(69,140)
Net changes in assets and liabilities affecting operating activities:		
Accounts receivable	124,748	(595,180)
Inventories	(485,739)	(713,084)
Other current assets and other assets	(428,176)	(1,241,372)
Accounts payable and other current liabilities	640,453	(1,705,007)
Other long-term liabilities	239,703	267,730
Net cash used in operating activities	(98,152)	(250,316)
Cash flows from investing activities:		
Additions to property and equipment	(172,899)	(98,275)
Purchases of marketable securities	(2,029,414)	(3,643,894)
Proceeds from sale of marketable securities	9,644,592	3,676,745
Additions to intangible assets	(841,647)	(1,554,410)
Net cash provided by (used in) investing activities	6,600,632	(1,619,834)
Cash flows from financing activities:		
Net borrowings on line of credit	3,900,000	2,000,000
Excess tax expense derived from exercise of stock options	—	(907,270)
Repurchase of common shares	(2,893,857)	(1,879,395)
Net cash provided by (used in) financing activities	1,006,143	(786,665)
Net increase (decrease) in cash and cash equivalents	7,508,623	(2,656,815)
Cash and cash equivalents at beginning of period	34,510,330	38,203,059
Cash and cash equivalents at end of period	$ 42,018,953	$ 35,546,244

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

CUMBERLAND PHARMACEUTICALS INC. AND SUBSIDIARIES
Condensed Consolidated Statement of Equity
(Unaudited)

	Common stock				
	Shares	Amount	Retained earnings	Noncontrolling interests	Total equity
Balance, December 31, 2016	16,074,176	$ 54,643,268	$ 18,604,931	$ (127,380)	$ 73,120,819
Cumulative effect from change in accounting principle (Note 7)	—	—	1,082,924	—	1,082,924
Share-based compensation	146,275	849,198	—	—	849,198
Repurchase of common shares	(438,715)	(2,906,900)	—	—	(2,906,900)
Net loss	—	—	(7,178,088)	(49,923)	(7,228,011)
Balance, September 30, 2017	15,781,736	$ 52,585,566	$ 12,509,767	$ (177,303)	$ 64,918,030

See accompanying Notes to Unaudited Condensed Consolidated Financial Statements.

(1) ORGANIZATION AND BASIS OF PRESENTATION

Cumberland Pharmaceuticals Inc. (“Cumberland,” the “Company,” or as used in the context of “we,” “us,” or “our”) is a specialty pharmaceutical company focused on the acquisition, development and commercialization of branded prescription products. The Company's primary target markets are hospital acute care, gastroenterology, and oncology supportive care. These medical specialties are characterized by relatively concentrated prescriber bases that the Company believes can be penetrated effectively by small, targeted sales forces. Cumberland is dedicated to providing innovative products that improve quality of care for patients and address unmet or poorly met medical needs.

Cumberland focuses its resources on maximizing the commercial potential of its products, as well as developing new product candidates, and has both internal development and commercial capabilities. The Company’s products are manufactured by third parties, which are overseen by Cumberland’s quality control and manufacturing professionals. The Company works closely with its third-party distribution partners to make its products available in the United States.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements of the Company have been prepared on a basis consistent with the December 31, 2016 audited consolidated financial statements, with the exception of the impacts of adopting accounting pronouncements during 2017, 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 unaudited 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 ("U.S. GAAP"). These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes included in our Annual Report on Form 10-K for the year ended December 31, 2016. The results of operations for the three and nine months ended September 30, 2017 are not necessarily indicative of the results to be expected for the entire fiscal year or any future period.

Total comprehensive income (loss) consisted solely of net income (loss) for the three and nine months ended September 30, 2017 and 2016.

Recent Accounting Guidance

Recent Adopted Accounting Pronouncements

In March 2016, the Financial Accounting Standards Board ("FASB") released in the form of an Accounting Standards Update ("ASU"), "Compensation - Stock Compensation: Improvements to Employee Share-Based Payment Accounting." The ASU includes multiple provisions intended to simplify various aspects of the accounting for share-based payments. While aimed at reducing the cost and complexity of the accounting for share-based payments, the amendments are expected to broadly and significantly impact the net income, earnings per share ("EPS"), and the statement of cash flows. The ASU is effective for public companies in annual periods beginning after December 15, 2016, and interim periods within those years. Effective January 1, 2017, the Company adopted this standard using the required modified retrospective method for the impact on its Balance Sheet. The adoption impact on its Statement of Operations was completed on a prospective basis. The impact of the adoption is discussed in Note 7. Income Taxes.

In July 2015, the FASB issued amended guidance in the form of a FASB ASU, “Inventory: Simplifying the Measurement of Inventory.” The amended guidance requires entities to measure inventory at the lower of cost or net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The requirement replaced the lower of cost or market evaluation. Accounting guidance is unchanged for inventory measured using last-in, first-out (“LIFO”) or the retail method. The amendments in this update are effective for fiscal years beginning after December 15, 2016. Effective January 1, 2017, the Company adopted this standard on a prospective basis. Adoption of this standard had no material impact to Cumberland's condensed consolidated financial statements and disclosures.

Recent Accounting Pronouncements - Not Yet Adopted

In November 2016, the FASB issued ASU, “Statement of Cash Flows-Restricted Cash-a consensus of the FASB Emerging Issues Task Force.” This revised standard is an effort by the FASB to reduce existing diversity in practice by providing specific guidance on the presentation of restricted cash or restricted cash equivalents in the statement of cash flows. The updated guidance requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash and restricted cash equivalents. As such, amounts generally described as restricted cash and restricted cash equivalents should be included in the “beginning-of-period” and “end-of-period” total amounts shown on the statement of

cash flows. The effective date for this standard is for years beginning after December 15, 2017, with early adoption permitted. The Company is evaluating the potential impact of this adoption on its condensed consolidated financial statements and disclosures.

In August 2016, the FASB issued amended guidance in the form of a FASB ASU, "Classification of Certain Cash Receipts and Cash Payments." The core principle of the new guidance is to address eight specific cash flow issues with the objective of reducing the existing diversity in practice. The amendments in this update are effective for fiscal years beginning after December 15, 2017. The accounting guidance should be applied retrospectively and early adoption is permitted. The Company continues to evaluate the potential impact of this adoption on its condensed consolidated financial statements and disclosures but currently it does not anticipate that adoption will have a material impact.

In May 2014, the FASB issued amended guidance in the form of a FASB ASU, "Revenue from Contracts with Customers (ASC 606)." The core principle of the new guidance is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. The new guidance defines a five-step process to achieve this core principle and, in doing so, additional judgments and estimates may be required within the revenue recognition process. The new standard will replace most of the existing revenue recognition standards in U.S. GAAP when it becomes effective. In July 2015, the FASB issued a one-year deferral of the adoption date, which extended the effective date for us to January 1, 2018, at which point we will adopt the standard. The new standard can be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of the change recognized at the date of the initial application. The ASU also includes a cohesive set of quantitative and qualitative disclosure requirements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from the entity's contracts with customers.

The Company has evaluated its revenue sources and individual components of the revenue process and is in the process of finalizing how the adoption of the ASU will impact its condensed consolidated financial statements. Cumberland expects to adopt ASC 606 using the modified retrospective method and while the Company continues to evaluate the effect of the standard, preliminarily, it does not anticipate a material impact on the consolidated financial statements. To complete the assessment of the impact of the standard to the financial statements, Cumberland continues to evaluate all implications of the standard, method of adoption and related financial disclosures. Additionally, the Company continues to monitor modifications, clarifications and interpretations issued by the FASB that may impact current conclusions.

In February 2016, the FASB issued guidance in the form of a FASB ASU, "Leases." The new standard establishes a right-of-use (ROU) model that requires a lessee to record an ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain optional practical expedients available. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We are evaluating our current lease agreements for the impact of our pending adoption of the new standard on our consolidated financial statements and disclosures. Our material operating leases include the lease of approximately 25,500 square feet of office space in Nashville, Tennessee for our corporate headquarters, with the lease expiring in October 2022. The Cumberland Emerging Technologies ("CET") lease, through April 2018, of approximately14,200 square feet of office and wet laboratory space in Nashville, Tennessee is also included to operate the CET Life Sciences Center.

Accounting Policies:

Use of Estimates

In preparing the condensed consolidated financial statements in conformity with U.S. GAAP, 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 results could differ from those estimates under different assumptions and conditions. The Company's most significant estimates include: (1) its allowances for chargebacks and accruals for rebates and product returns, (2) the allowances for obsolescent or unmarketable inventory and (3) the projection of future taxable income for the realization of deferred tax assets.

Operating Segments

The Company has one operating segment which is specialty pharmaceutical products. Management has chosen to organize the Company based on the type of products sold. Operating segments are identified as components of an enterprise about which separate discrete financial information is evaluated by the chief operating decision maker, or decision-making group, in making decisions regarding resource allocation and assessing performance. The Company, which uses consolidated financial information in determining how to allocate resources and assess performance, has concluded that our specialty pharmaceutical products compete in similar economic markets and similar circumstances. Substantially all of the Company's assets are located in the United States and total revenues are primarily attributable to U.S. customers.

(2) MARKETABLE SECURITIES

The Company invests in marketable debt securities in order to maximize its return on cash. Marketable securities consist of U.S. Government Agency notes and bonds, and bank-guaranteed, variable rate demand notes ("VRDN"). At the time of purchase, the Company classifies marketable securities as either trading securities or available-for-sale securities, depending on the intent at that time. As of September 30, 2017 and December 31, 2016, the marketable securities are comprised solely of trading securities. Trading securities are carried at fair value with unrealized gains and losses recognized as a component of interest income in the condensed consolidated statements of operations and comprehensive income (loss).

The Company's fair value measurements follow the appropriate rules as well as the fair value hierarchy that prioritizes the information used to develop the measurements. It applies whenever other guidance requires (or permits) assets or liabilities to be measured at fair value and gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

A summary of the fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels is described below:

Level 1 - Quoted prices for identical instruments in active markets.

Level 2 - Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3 - Significant inputs to the valuation model are unobservable.

The Company's fair values of marketable securities are determined based on valuations provided by a third-party pricing service, as derived from such service's pricing models, and are considered either Level 1 or Level 2 measurements, depending on the nature of the investment. The Company has no marketable securities in which the fair value is determined based on Level 3 measurements. The level of management judgment required in evaluating fair value for Level 1 investments is minimal. Similarly, there is little subjectivity or judgment required for Level 2 investments valued using valuation models that are standard across the industry and whose parameter inputs are quoted in active markets. Inputs to the models may include, but are not limited to, reported trades, executable bid and ask prices, broker/dealer quotations, prices or yields of securities with similar characteristics, benchmark curves or information pertaining to the issuer, as well as industry and economic events. Based on the information available, the Company believes that the valuations provided by the third-party pricing service, as derived from such service's pricing models, are representative of prices that would be received to sell the assets at the measurement date (exit prices). There were no transfers of assets between levels within the fair value hierarchy.

The following table summarizes the fair value of our marketable securities, by level within the fair value hierarchy, as of each period end:

	September 30, 2017			December 31, 2016		
	Level 1	Level 2	Total	Level 1	Level 2	Total
U.S. Agency issued mortgage-backed securities – variable rate	$ —	$ 5,456,811	$ 5,456,811	$ —	$ 6,814,957	$ 6,814,957
U.S. Agency notes and bonds – fixed rate	—	1,199,538	1,199,538	—	1,795,330	1,795,330
SBA loan pools – variable rate	—	1,398,668	1,398,668	—	1,346,824	1,346,824
Municipal bonds – VRDN	—	—	—	5,665,000	—	5,665,000
Total fair value of marketable securities	$ —	$ 8,055,017	$ 8,055,017	$ 5,665,000	$ 9,957,111	$ 15,622,111

(3) EARNINGS (LOSS) PER SHARE

The following table reconciles the numerator and denominator used to calculate diluted earnings (loss) per share for the three and nine months ended September 30, 2017 and 2016:

	Three months ended September 30,	
	2017	2016
Numerator:		
Net income (loss) attributable to common shareholders	$ (743,031)	$ 106,166
Denominator:		
Weighted-average shares outstanding – basic	15,867,159	16,217,442
Dilutive effect of other securities	—	287,126
Weighted-average shares outstanding – diluted	15,867,159	16,504,568

	Nine months ended September 30,	
	2017	2016
Numerator:		
Net income (loss) attributable to common shareholders	$ (7,178,088)	$ (194,989)
Denominator:		
Weighted-average shares outstanding – basic	15,973,737	16,268,579
Dilutive effect of other securities	—	—
Weighted-average shares outstanding – diluted	15,973,737	16,268,579

As of September 30, 2017 and 2016, restricted stock awards and options to purchase 14,175 and 21,950 shares of common stock, respectively, were outstanding but were not included in the computation of diluted earnings per share because the effect would be antidilutive.

(4) REVENUES

Product Revenues

The Company's net revenues consisted of the following for the three and nine months ended September 30, 2017 and 2016:

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Products:				
Acetadote	$ 1,342,457	$ 1,807,495	$ 4,331,675	$ 5,532,893
Omeclamox-Pak	190,835	752,808	1,213,635	2,154,596
Kristalose	2,749,966	3,671,397	8,037,994	10,915,276
Vaprisol	385,541	496,279	1,346,793	1,286,126
Caldolor	896,640	1,357,289	2,762,790	3,060,441
Ethyol	2,566,611	519,400	8,325,254	519,400
Totect	2,916,425	—	2,916,425	—
Other	148,486	187,085	566,277	475,388
Total net revenues	$ 11,196,961	$ 8,791,753	$ 29,500,843	$ 23,944,120

Cumberland supplies Perrigo Company ("Perrigo") with an Authorized Generic version of the Company's Acetadote product. The Company's revenue generated by sales of its Authorized Generic distributed by Perrigo is included in the Acetadote product revenue presented above. The Company's share of Authorized Generic revenue was $0.9 million and $1.2 million for third quarter of 2017 and 2016 and $3.0 million and $3.5 million on a year-to-date basis as of September 30, 2017 and 2016, respectively. Totect revenue includes $0.3 million in Cardioxane net revenue for the third quarter of 2017.

Other Revenues

The Company has entered into agreements, beginning in 2012, with international partners for commercialization of the Company's products. The international agreements provide that each of the partners are responsible for seeking regulatory approvals for the products, and following approvals, each partner will handle ongoing distribution and sales in the respective international territories. The Company maintains responsibility for the intellectual property and product formulations. Under the international agreements, the Company is entitled to receive non-refundable, up-front payments at the time the agreements are entered into and milestone payments upon the partners' achievement of defined regulatory approvals and sales milestones. The Company recognizes revenue for these substantive milestones using the milestone method. The Company is also entitled to receive royalties on future sales of the products under the agreements.

(5) INVENTORIES

The Company works closely with third parties to manufacture and package finished goods for sale. Based on the relationship with the manufacturer or packager, the Company will either take title to the finished goods at the time of shipment or at the time of arrival from the manufacturer. The Company then warehouses such goods until distribution and sale. As discussed in Note 1, effective January 1, 2017, inventories are stated at the lower of cost or net realizable value with cost determined using the first-in, first-out method.

The Company continually evaluates inventory for potential losses due to excess, obsolete or slow-moving inventory by comparing sales history and sales projections to the inventory on hand. When evidence indicates that the carrying value may not be recoverable, a charge is taken to reduce the inventory to its current net realizable value. At September 30, 2017 and December 31, 2016, the Company has recognized and maintained cumulative charges for potential obsolescence and discontinuance losses of approximately $0.6 million and $0.3 million, respectively.

In connection with the acquisition of certain product rights related to the Kristalose brand, the Company is responsible for the purchase of the active pharmaceutical ingredient ("API") for Kristalose and maintains the inventory at the third-party manufacturer. As the API is consumed in production, the value of the API is transferred from raw materials to finished goods. API for the Company's Vaprisol brand is also included in the raw materials inventory total at September 30, 2017 and December 31, 2016.

As of September 30, 2017 and December 31, 2016, net inventory consisted of the following:

	September 30, 2017	December 31, 2016
Raw materials and work in process	$ 3,188,240	$ 2,810,711
Consigned inventory	247,003	277,324
Finished goods	2,422,225	2,283,694
Total	$ 5,857,468	$ 5,371,729

(6) SHAREHOLDERS' EQUITY AND DEBT

Share Repurchases

The Company currently has a share repurchase program to repurchase up to $10.0 million of its common stock pursuant to Rule 10b-18 of the Securities Exchange Act. In January 2016, the Company's Board of Directors established the current $10.0 million repurchase program to replace the prior authorizations. During the nine months ended September 30, 2017 and September 30, 2016, the Company repurchased 438,715 shares and 407,457 shares, respectively, of common stock for approximately $2.9 million and $1.9 million, respectively.

Restricted Share Grants

During the nine months ended September 30, 2017, the Company issued 233,525 shares of restricted stock to employees and directors. Restricted stock issued to employees generally cliff-vests on the fourth anniversary of the date of grant and for directors on the one-year anniversary of the date of grant. Stock compensation expense is presented as a component of general and administrative expense in the condensed consolidated statements of operations and comprehensive income (loss).

New Debt Agreement

On July 31, 2017, the Company entered into a Revolving Credit Loan Agreement with Pinnacle Bank ("Pinnacle Agreement"). The Pinnacle Agreement replaced the June 2014 Revolving Credit Loan Agreement with SunTrust Bank ("SunTrust Agreement"), which was to expire on June 30, 2018. The Pinnacle Agreement provides for an aggregate principal amount of up to $20 million and has a three-year term expiring on July 31, 2020. The initial revolving line of credit is up to $12 million with the ability to increase the borrowing amount up to $20 million, upon the satisfaction of certain conditions.

The interest rate on the Pinnacle Agreement is based on LIBOR plus an interest rate spread. There is no LIBOR minimum and the LIBOR pricing provides for an interest rate spread of 1.75% to 2.75% (representing an interest rate of 3.0% at September 30, 2017). In addition, a fee of 0.25% per year is charged on the unused line of credit. Interest and the unused line fee are payable quarterly. Borrowings under the line of credit are collateralized by substantially all of our assets.

Under the Pinnacle Agreement, Cumberland is subject to one financial covenant, the maintenance of a Funded Debt Ratio, as such term is defined in the agreement and determined on a quarterly basis. In addition, the Company is subject to standard general covenants. The Company achieved compliance with the Funded Debt Ratio covenant as of September 30, 2017 through the utilization of the covenant cure section of the agreement.

There were no early termination penalties upon termination of the previous SunTrust Agreement and the Company incurred less than $0.1 million in deferred financing costs related to the new Pinnacle Agreement, which will be amortized to interest expense using the effective interest method over the term of that agreement.

Previous Debt Agreement

On June 26, 2014, Cumberland entered into the SunTrust Agreement. The Company had $8.0 million in borrowings under that agreement at September 30, 2017. On July 29, 2016, Cumberland amended the agreement to extend the original three-year term by an additional year. The agreement provided for an aggregate principal amount up to $20 million. The initial revolving line of credit was up to $12 million, with the ability to increase the borrowing amount up to $20 million, upon the satisfaction of certain conditions.

The interest rate on the SunTrust Agreement was based on LIBOR plus an interest rate spread. There was no LIBOR minimum and the LIBOR pricing provided for an interest rate spread of 1.0% to 2.85%. In addition, a fee of 0.25% per year was charged on the unused line of credit. Interest and the unused line fee were payable quarterly. Borrowings under the line of credit were collateralized by substantially all of the Company’s assets.

Under the SunTrust Agreement, Cumberland was subject to certain financial covenants, including, but not limited to, maintaining a Funded Debt Ratio.

(7) INCOME TAXES

The Company adopted FASB ASU, "Compensation - Stock Compensation: Improvements to Employee Share-Based Payment Accounting" effective January 1, 2017. The Company adopted this standard using the required modified retrospective method for the impact on its Balance Sheet. The adoption impact on its Statement of Operations was completed on a prospective basis.

The impact of adoption on Cumberland's consolidated financial statements included the recording of $44.1 million in previously unrecognized net operating loss carryforwards, net of valuation allowances, generated from the exercise of nonqualified options during 2009. These net operating loss carryforwards occurred as a result of the actual tax benefit realized upon an employee's exercise exceeding the cumulative book compensation charge associated with the options. This adoption resulted in the recording of $1.1 million in net non-current deferred tax assets and retained earnings effective as of January 1, 2017. This $1.1 million in net non-current deferred tax assets is the result of a deferred tax asset of $17.0 million, net of a related valuation allowance of $15.9 million. Under the previous accounting guidance, these benefits had been recognized in the year in which they were able to reduce current income taxes payable. As part of the Company's adoption of the FASB guidance and its continued evaluation of Cumberland's utilization of net operating loss carryforwards and other deferred tax assets, including updates to our forecasts of future taxable income, the Company also recorded an additional valuation allowance of $1.0 million for its federal Orphan Drug and Research and Development tax credits that expire between 2021 and 2036. This additional valuation allowance impacted Cumberland's effective tax rate during the first quarter of 2017.

During the second quarter of 2017, as part of the Company's continued evaluation of the utilization of its net operating loss carryforwards and other deferred tax assets, including the most recent three-year operating results, the Company recorded an additional valuation allowance of $3.5 million for its remaining deferred tax assets. This additional valuation allowance impacted Cumberland's effective tax rate during the second quarter of 2017 and all deferred tax assets have a full valuation allowance.

The net operating loss carryforwards generated during 2009 consisted of $44.1 million in federal and $45.4 million in state amounts. Since they were generated, the Company has utilized these net operating loss carryforwards to pay minimal income taxes. The Company will continue to pay minimal income taxes during 2017 and beyond, through the continued utilization of these net operating loss carryforwards, as it is able to achieve taxable income through its operations.

The newly adopted FASB guidance also results in any changes in the tax benefit being recognized in the provision for taxes on income during the period incurred. Previously, the Company recorded these benefits directly to equity. During the first quarter of 2017, 146,275 restricted shares previously issued to employees and directors vested. As the market price on the vesting date exceeded the market price on the grant dates, the Company experienced a tax benefit in excess of compensation cost, also referred

to as a tax benefit "windfall." This tax benefit windfall resulted in an additional tax benefit of $0.1 million during the first quarter of 2017.

The Company will continue to evaluate and record the future vesting of shares of restricted stock issued to employees and directors as well as any tax benefit windfall. In the event that future restricted shares have a market price on the vesting date that is less than the market price on the grant dates, the Company will experience a tax benefit less than the compensation cost, also referred to as a tax benefit "shortfall."

As a part of the adoption, the tax benefit or deficiency is now classified and presented as an operating cash flow. In the diluted net earnings per share calculation, when applying the treasury stock method for shares that could be repurchased, the assumed proceeds no longer include the amount of excess tax benefit. These changes have both been applied on a prospective basis. All cash payments made to taxing authorities on employees' share-based compensation are classified as a cash outflow from financing activities, consistent with the Company's existing current presentation. Additionally, the Company has elected not to adjust its policy on accounting for equity award forfeitures.

(8) COLLABORATIVE AGREEMENTS

Cumberland is a party to several collaborative arrangements with certain research institutions to identify and pursue promising pre-clinical pharmaceutical product candidates. The Company has determined that 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 Administration (SBIR/STTR) grant programs. Expenses incurred under these collaborative agreements are included in research and development expenses and funding received from private sector investments and grants are recorded as net revenues in the condensed consolidated statements of operations and comprehensive income (loss).

(9) COMMITMENTS AND CONTINGENCIES

Legal Matters

The Company developed a new formulation of Acetadote (acetylcysteine) Injection as part of the Phase IV commitment in response to a request by the FDA regarding the role of EDTA in the product's formulation. The Company has received several patents from the United States Patent and Trademark Office ("USPTO") since 2012 as well as notices that its Acetadote patents are being challenged on the basis of invalidity or non-infringement by others.

During the third quarter of 2015, an arbitrator issued a final award in the Company's favor, enjoining Mylan Pharma Group Limited and Mylan Teoranta, together with all their affiliates ("Mylan"), from selling, delivering, or giving away any acetylcysteine injectable drug product to another entity or person until April 30, 2018. The arbitration request was filed with the American Arbitration Association for claims against Mylan in connection with agreements which require that Mylan manufacture and supply acetylcysteine drug product, including Acetadote, for us exclusively until April 2016. As the prevailing party, the Company received reimbursement of its attorney's fees and related costs associated with the arbitration.

During the third quarter of 2015, the United States District Court for the Northern District of Illinois, Eastern Division ("District Court") ruled in the Company's favor in its lawsuit against Mylan for infringement of its U.S. Patent number 8,399,445 (the "445 Acetadote Patent"). The opinion upheld our 445 Acetadote Patent and expressly rejected Mylan's validity challenge. The District Court ruled that Mylan is liable to us for infringement of the 445 Acetadote patent in light of Mylan's Abbreviated New Drug Application in which Mylan sought to market a generic version of Acetadote. On November 17, 2015, the District Court entered an order enjoining Mylan and its affiliates from selling or using its generic version of Acetadote until August 2025, the date of expiration of the 445 Acetadote Patent. On October 30, 2015, Mylan filed a notice of appeal to the U.S. Court of Appeals for the Federal Circuit (the "Appeals Court").

On January 26, 2017, the Appeals Court affirmed the District Court ruling in the Company's favor in its lawsuit against Mylan for infringement of the 445 Acetadote Patent. The Appeals Court opinion affirmed the District Court's ruling upholding Cumberland's 445 Acetadote Patent and expressly rejected Mylan's validity challenge. Additional information on these developments is included in *Part 1, Item 3, Legal Proceedings* in our Annual Report on Form 10-K for the year ended December 31, 2016.

(10) NEW PRODUCTS

Totect ®

In late July 2017, the Company initiated distribution and sale of Totect (dexrazoxane hydrochloride) in the United States. This followed the FDA approval of the updated labeling and product manufacturer for the product. In late September 2017, the Company announced the launch of Totect promotion in the United States.

Totect is an FDA-approved hospital based emergency oncology intervention drug, indicated to treat the toxic effects of anthracycline chemotherapy. It treats anthracycline extravasation that occurs when the injected medication escapes from the blood vessels and circulates into surrounding tissues in the body, causing severe damage and serious complications. Totect can limit such damage without the need for additional surgeries or procedures and enables patients to continue their essential anti-cancer treatment.

In preparation for the Totect promotional launch, the Company completed the training of its sales and medical organization, stocked the product at select wholesalers serving hospitals, and recently introduced the product website. Totect is supported by Cumberland's hospital sales force.

The Company launched Totect during a national shortage of dexrazoxane. It's our second oncology support product and the second product licensed to it through the Strategic Alliance with Clinigen Group plc ("Clinigen").

The Company began generating revenue from the sale of Totect during the third quarter of 2017. Totect contributed $2.6 million in net revenue for the three months ended September 30, 2017.

Cardioxane®

During August 2017, the Company also began shipments of Cardioxane (dexrazoxane hydrochloride, injection) which is used to support oncology patients from the cardiac complications associated with certain chemotherapeutic agents. These shipments were under a special, expedited clearance from the FDA to address the shortage of dexrazoxane in the United States. The Company intends to make Cardioxane available in the United States through the end of 2017, until the current dexrazoxane drug shortage is alleviated.

The Company is distributing Cardioxane through its Strategic Alliance with Clinigen who is supplying the product and has been selling it in several markets outside the United States.

The Company began generating revenue from the sale of Cardioxane during the third quarter of 2017. Cardioxane contributed $0.3 million in net revenue for the three months ended September 30, 2017.

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; 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 24 through 41, and "Special Note Regarding Forward-Looking Statements" on pages 41 and 42 of our Annual Report on Form 10-K for the year ended December 31, 2016. 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 included in this report on Form 10-Q.

OVERVIEW

Our Business

Cumberland Pharmaceuticals Inc. ("Cumberland," the "Company," or as used in the context of "we," "us," or "our"), is a specialty pharmaceutical company focused on the acquisition, development and commercialization of branded prescription products. Our primary target markets are hospital acute care, gastroenterology, and oncology supportive care. These medical specialties are characterized by relatively concentrated prescriber bases that we believe can be penetrated effectively by small, targeted sales forces. Cumberland is dedicated to providing innovative products that improve quality of care for patients and address unmet or poorly met medical needs. We promote our approved products through our hospital and gastroenterology sales forces in the United States and are establishing a network of international partners to bring our products to patients in their countries.

Our portfolio of FDA approved brands includes:

- **Acetadote®** (*acetylcysteine*) Injection, for the treatment of acetaminophen poisoning;
- **Caldolor®** (*ibuprofen*) Injection, for the treatment of pain and fever;
- **Kristalose®** (*lactulose*) for Oral Solution, a prescription laxative, for the treatment of chronic and acute constipation;
- **Omeclamox®-Pak**, (*omeprazole, clarithromycin, amoxicillin*) for the treatment of Helicobacter pylori (*H. pylori*) infection and related duodenal ulcer disease;
- **Vaprisol®** (*conivaptan*) Injection, to raise serum sodium levels in hospitalized patients with euvolemic and hypervolemic hyponatremia;
- **Ethyol®** *(amifostine)* Injection, for the reduction of xerostomia (dry mouth) in patients undergoing post-operative radiation treatment for head and neck cancer, and the renal toxicity associated with the administration of cisplatin in patients with advanced ovarian cancer; and
- **Totect®** *(dexrazoxane hydrochloride)* Injection, for emergency oncology intervention, to treat the toxic effects of anthracycline chemotherapy in case of extravasation (drug leakage from the bloodstream into the tissues).

Our pipeline of product candidates includes:

- **Hepatoren®** (*ifetroban*) Injection, a Phase II candidate for the treatment of critically ill patients suffering from liver and kidney failure associated with hepatorenal syndrome ("HRS");
- **Boxaban®** *(ifetroban)* Oral Capsules, a Phase II candidate for the treatment of asthma patients with aspirin-exacerbated respiratory disease ("AERD");

- **Vasculan®** *(ifetroban)* Oral Capsules, a Phase II candidate for the treatment of patients with the systemic sclerosis (SSc) form of autoimmune disease;

- **Portaban™** *(ifetroban)* Injection and Oral Capsules, a Phase II candidate for the treatment of patients with portal hypertension associated with liver disease; and

- **Methotrexate** (*methotrexate*) Injection, an approval submission candidate for the treatment of active rheumatoid, juvenile idiopathic and severe psoriatic arthritis, as well as severe disabling psoriasis.

We have both product development and commercial capabilities, and believe we can leverage our existing infrastructure to support our expected growth. Cumberland's management team consists of pharmaceutical industry veterans experienced in business development, product development, regulatory, manufacturing, sales, marketing and finance. Our business development team identifies, evaluates and negotiates product acquisition, licensing and co-promotion opportunities. Cumberland's product development team creates proprietary product formulations, manages our clinical studies, prepares all regulatory submissions and manages our medical call center. The Company's quality and manufacturing professionals oversee the manufacture, release, and shipment of our products. Our marketing and sales professionals are responsible for our commercial activities, and we work closely with our distribution partners to ensure availability and delivery of our products.

Growth Strategy

Our growth strategy involves maximizing the potential of our existing brands while continuing to build a portfolio of differentiated products. We currently market seven FDA approved products for sale in the United States. Through our international partners, we are working to bring our products to patients in their countries. We also look for opportunities to expand our products into additional patient populations through clinical trials, new indications, and select investigator-initiated studies. We actively pursue opportunities to acquire additional marketed products as well as late-stage development product candidates in our target medical specialties. Our clinical team is developing a pipeline of new product candidates to address unmet medical needs. Further, we are supplementing these activities with the pipeline drug development activities at Cumberland Emerging Technologies ("CET"), our majority-owned subsidiary. Specifically, we are seeking long term sustainable growth by executing the following plans:

- **Support and expand the use of our marketed products.** We continue to evaluate our products following their FDA approval to determine if further clinical work could expand the potential market opportunities. We will continue to explore opportunities for label expansion to bring our products to new patient populations. The Caldolor pediatric approval reflects our successful implementation of this strategy.

- **Selectively add complementary brands.** In addition to our product development activities, we are also seeking to acquire products or late-stage development product candidates to continue to build a portfolio of complementary brands. We focus on under-promoted, FDA approved drugs as well as late-stage development products that address poorly met medical needs. We will continue to target product acquisition candidates that are competitively differentiated, have valuable intellectual property or other protective features, and allow us to leverage our existing infrastructure. Our acquisitions of the product rights to Ethyol and Totect in the U.S. represent recent examples of our execution of this strategy.

- **Progress clinical pipeline and incubate future product opportunities at CET.** We believe it is important to build a pipeline of innovative new product opportunities. Our ifetroban Phase II development programs represent the implementation of this strategy. At CET, we are supplementing our acquisition and late-stage development activities with the early-stage drug development activities. CET partners with universities and other research organizations to develop promising, early-stage product candidates, and Cumberland has the opportunity to negotiate rights to further develop and commercialize them in the U.S and other markets.

- **Leverage our infrastructure through co-promotion partnerships.** We believe that our commercial infrastructure can help drive prescription volume and product sales. We look for strategic partners that can accentuate our operational effectiveness and maximize the opportunity for our brands. Our recent co-promotion partnership with Poly Pharmaceuticals, Inc. allows us to expand current promotional support for Kristalose across the United States.

- **Continue to build the international contribution to our business.** We have established our own commercial capabilities, including two sales divisions to cover the U.S. market for our products. We are also building a network of select international partners to register our products and make them available to patients in their countries. We will continue to expand our network of international partners and continue to support our partners' registration and commercialization efforts in their respective territories.

- **Continue to manage our operations with financial discipline.** We continually work to manage our expenses in line with our revenues in order to deliver positive cash flow from operations. We remain in a strong financial position, with high margins, and a strong balance sheet. We use excess cash flow for our ongoing share repurchase program.

Cumberland was incorporated in 1999 and has been headquartered in Nashville, Tennessee since inception. During 2009, we completed an initial public offering of our common stock and listing on the NASDAQ exchange. Our website address is *www.cumberlandpharma.com*. We make available through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all other material press releases, filings and amendments to those reports as soon as reasonably practicable after their filing with the SEC. These filings are also available to the public at *www.sec.gov*.

Recent Developments

Totect® Distribution and Launch

In late July 2017, we initiated distribution and sale of Totect (dexrazoxane hydrochloride) in the United States. This followed the FDA approval of the updated labeling and product manufacturer for the product. In late September 2017, we announced the launch of Totect promotion in the United States.

Totect is an FDA-approved hospital based emergency oncology intervention drug, indicated to treat the toxic effects of anthracycline chemotherapy. It treats anthracycline extravasation that occurs when the injected medication escapes from the blood vessels and circulates into surrounding tissues in the body, causing severe damage and serious complications. Totect can limit such damage without the need for additional surgeries or procedures and enables patients to continue their essential anti-cancer treatment.

In preparation for the Totect promotional launch, we completed the training of our sales and medical organization, stocked the product at select wholesalers serving hospitals, and recently introduced the product website. Totect is supported by our hospital sales force.

We launched Totect during a national shortage of dexrazoxane, resulting in strong initial demand for the product. It's our second oncology support product and the second product licensed to us through our Strategic Alliance with Clinigen Group plc ("Clinigen").

Cardioxane® Shipments

During August 2017, we also began shipments of Cardioxane (dexrazoxane hydrochloride, injection) which is used to support oncology patients from the cardiac complications associated with certain chemotherapeutic agents. These shipments were under a special, expedited clearance from the FDA to address the shortage of dexrazoxane in the United States. We intend to make Cardioxane available in the United States through the end of 2017, until the current dexrazoxane drug shortage is alleviated.

We are distributing Cardioxane through our Strategic Alliance with Clinigen who is supplying the product to us and has been selling it in several markets outside the United States.

Kristalose® Co-Promotion

During the third quarter 2017, we fully implemented our co-promotion arrangements with Poly Pharmaceuticals, Inc. (“Poly”) following a multi-year agreement signed in April 2017. Poly is a privately held U.S. specialty pharmaceutical company that is featuring Kristalose to an expanded number of physicians. Poly’s sales organization is more than doubling the number of nationwide physicians called upon with Kristalose bringing the brand’s message to thousands of additional medical professionals. Cumberland continues to manage the national marketing, distribution, and regulatory activities associated with the product.

Boxaban® Clinical Program

We are developing Boxaban for the treatment of Aspirin-Exacerbated Respiratory Disease ("AERD"), also known as Samter's Triad, a a chronic medical condition that consists of three clinical features: asthma, sinus disease with nasal polyps and sensitivity to aspirin. AERD is characterized by sharp increases in inflammatory mediators and platelet activity within the respiratory system.

We completed an initial Phase II clinical study to evaluate the safety and tolerability of Boxaban in AERD patients. The multicenter study involved sixteen patients at several U.S. medical centers led by the Scripps Research Institute. Results indicated that Boxaban was well tolerated with no safety concerns noted in patients with a history of AERD.

Earlier this year the FDA cleared Cumberland’s investigational new drug (“IND”) application for the Company’s AERD clinical program. Following this clearance, we initiated a follow-on multicenter Phase II efficacy study to evaluate the efficacy of Boxaban in seventy-six patients with symptomatic AERD. Enrollment in this multi-center, placebo controlled study is now underway at a growing number of allergy and asthma centers across the United States.

Vasculan® Clinical Program

Cumberland has initiated the clinical development of Vasculan for the treatment of systemic sclerosis (SSc), also known as scleroderma. SSc is a debilitating autoimmune disorder characterized by diffuse fibrosis of the skin and internal organs, as well

as vascular dysfunction. Preclinical studies have shown that ifetroban prevents and can restore cardiac function in a preclinical model of pulmonary arterial hypertension.

The FDA has cleared Cumberland's IND to evaluate the safety and efficacy of Vasculan in patients with SSc. As a result, we initiated a Phase II multicenter study in thirty-four SSc patients. Enrollment in this randomized, placebo controlled trial is ongoing at several scleroderma centers of excellence in the United States.

Portaban™ Clinical Program

The Company has also initiated the clinical development of Portaban for the treatment of portal hypertension ("PH") associated with chronic liver disease. Preclinical studies have shown ifetroban can reduce portal pressure, inflammation, and fibrosis in multiple models of liver injury.

The FDA cleared Cumberland's IND for a clinical development program evaluating the safety and efficacy of Portaban in patients with PH. Following that clearance, a multicenter Phase II study in thirty PH patients was initiated. Enrollment in this randomized, placebo controlled study is now underway at several United States hepatology centers.

Hepatoren® Clinical Program

We are developing Hepatoren as a potential treatment for Hepatorenal Syndrome ("HRS") - a life threatening condition involving liver and kidney failure, with a high mortality rate and no approved pharmaceutical therapy in this country. We completed a sixty-four patient Phase II study to evaluate the safety, efficacy and pharmacokinetics of Hepatoren for this unmet medical need.

Top line results from this study indicated that Hepatoren was overall well tolerated in the HRS patients with no safety concerns noted. We have filed the results from this study with the FDA, and are evaluating and designing strategies for a follow-on Phase II efficacy study.

New Hospital Product Candidate

Cumberland was responsible for the formulation, development and FDA approval of both Acetadote and Caldolor. Our Medical Advisory Board has helped us identify additional opportunities that address unmet or poorly met medical needs. As a result, Cumberland has successfully designed, formulated and completed the preclinical studies for a cholesterol reducing agent for use in the hospital setting. We have completed a successful Phase I study which defined the pharmacokinetic properties and supported a positive safety profile for this new product candidate. The study results and a proposed Phase II efficacy confirmation study will be discussed with the FDA.

Caldolor® Pediatric Study

We previously completed pediatric fever and pain studies leading to the FDA approval of Caldolor for use in children six months of age and older. We then reached agreement with the FDA to collect data on the use of Caldolor in children ranging in age from birth up to six months of age. As a result, a multicenter study is now underway at several United States centers to collect data from twenty-four patients in this age range.

Methotrexate Submission

We have held a meeting with the FDA to discuss the approval pathway for our injectable methotrexate products in the United States. As a result, we are now gathering the relevant information and preparing the submission for that approval. We previously entered into an agreement with the Nordic Group to commercialize their methotrexate product line in the United States which is designed for treating patients with arthritis and psoriasis. Cumberland is responsible for the registration and commercialization of these products while Nordic will handle the product's supply. Nordic has registered and is selling these methotrexate products in several European countries.

Acetadote® Patent Defense

Acetadote is our injectable formulation of N-Acetylcysteine ("NAC") for the treatment of acetaminophen overdose. We developed a new formulation of Acetadote (as part of the Phase IV commitment in response to a request by the FDA regarding the role of EDTA in the product's formulation).

Since 2012, the USPTO has issued a series of patents associated with Acetadote. Additional information and discussion regarding our Acetadote patents and patent defense is contained in *Part 1, Item 1, Business -Trademarks and Patents*, of our Annual Report on Form 10-K for the year ended December 31, 2016, which is incorporated by reference herein.

In January 2017, the Appeals Court affirmed the District Court ruling in the Company's favor in its lawsuit against Mylan for infringement of the 445 Acetadote Patent. The Appeals Court opinion affirmed the District Court's ruling upholding Cumberland's

445 Acetadote Patent and expressly rejected Mylan's validity challenge. Additional information on these developments is included in *Part 1, Item 3, Legal Proceedings* in our Form 10-K for the year ended December 31, 2016.

COMPETITION

The pharmaceutical industry is characterized by intense competition and rapid innovation. Our continued success in developing and commercializing pharmaceutical products will depend, in part, upon our ability to compete against existing and future products in our target markets. For more information see *Part 1, Item 1, Business -Competitors* in our Annual Report on Form 10-K for the year ended December 31, 2016 which is incorporated by reference and has been updated as follows:

Ethyol®

Ethyol is our patented, branded amifostine product indicated to reduce xerostomia (dry mouth) as a side-effect in patients undergoing post-operative radiation treatment for head and neck cancer. It also reduces the cumulative renal toxicity associated with the repeated administration of cisplatin in patients with advanced ovarian cancer. We launched the product in late 2016, and the authorized generic form of the product was withdrawn by Clinigen who markets branded Ethyol internationally. We have an exclusive license to the product which includes patent number 5,994,409 which is FDA Orange Book listed with a term until December 9, 2017. We also have a license to several additional Ethyol patents associated with the subcutaneous administration of the product that are not yet Orange Book listed. In July 2017, Mylan Laboratories Ltd. ("Mylan") received approval for an Abbreviated New Drug Application for a generic amifostine product. Sun Pharmaceuticals Industries Limited ("Sun") had also previously received approval for a generic amifostine product. Both the Mylan and Sun approvals appear to be only for the ovarian cancer indication but not the xerostomia indication. Therefore, we believe that Ethyol is currently the only amifostine product with FDA approval for both the xerostomia and ovarian cancer indications.

Totect®

Totect is our patented, branded dexrazoxane injection product indicated for the treatment of the extravasation associated with anthracycline chemotherapy. We have an exclusive license to the product which includes patent number 6,727,253 which is FDA Orange Book listed and has a term until March 13, 2020. Pfizer Inc.'s Zinecard® brand is a dexrazoxane product with FDA approval for a different indication - the cardiac complications associated with certain chemotherapeutic agents. Mylan, Gland Pharma Ltd and West-Ward Pharmaceuticals Corp appear to have previously received FDA approval for a generic dexrazoxane with the Zinecard cardiac protection indication. When we launched Totect, the FDA reported a national dexrazoxane shortage with both the Pfizer and Mylan products unavailable. Both companies indicated that their products may again be available in the U.S. in the future.

CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

Please see a discussion of our critical accounting policies and significant judgments and estimates on pages 49 through 51 in "Management's Discussion and Analysis" of our Annual Report on Form 10-K for the year ended December 31, 2016.

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 cannot be 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, fair value of marketable securities, inventories, provision for income taxes, share-based compensation, research and development expenses and intangible assets.

RESULTS OF OPERATIONS

Three months ended September 30, 2017 compared to the three months ended September 30, 2016

The following table presents the unaudited interim statements of operations for the three months ended September 30, 2017 and 2016:

	Three months ended September 30,		
	2017	2016	Change
Net revenues	$ 11,196,961	$ 8,791,753	$ 2,405,208
Costs and expenses:			
Cost of products sold	2,166,353	1,973,948	192,405
Selling and marketing	6,226,438	3,614,714	2,611,724
Research and development	943,162	644,662	298,500
General and administrative	2,090,785	1,865,575	225,210
Amortization	609,572	562,722	46,850
Total costs and expenses	12,036,310	8,661,621	3,374,689
Operating income (loss)	(839,349)	130,132	(969,481)
Interest income	94,833	51,636	43,197
Interest expense	(8,902)	(29,088)	20,186
Income (loss) before income taxes	(753,418)	152,680	(906,098)
Income tax (expense) benefit	(3,822)	(57,192)	53,370
Net income (loss)	$ (757,240)	$ 95,488	$ (852,728)

The following table summarizes net revenues by product for the periods presented:

	Three months ended September 30,		
	2017	2016	Change
Products:			
Acetadote	$ 1,342,457	$ 1,807,495	$ (465,038)
Omeclamox-Pak	190,835	752,808	(561,973)
Kristalose	2,749,966	3,671,397	(921,431)
Vaprisol	385,541	496,279	(110,738)
Caldolor	896,640	1,357,289	(460,649)
Ethyol	2,566,611	519,400	2,047,211
Totect	2,916,425	—	2,916,425
Other	148,486	187,085	(38,599)
Total net revenues	$ 11,196,961	$ 8,791,753	$ 2,405,208

Net revenues. Net revenues for the three months ended September 30, 2017 were $11.2 million compared to $8.8 million for the three months ended September 30, 2016, representing an increase of $2.4 million, or 27.4%.

The increase in total net revenues from the prior year period included net revenue of $2.9 million for our newest brand, Totect and a $2.0 million increase in Ethyol revenue compared to the third quarter of 2016.

The Company began shipments of Totect in July of 2017, resulting in $2.9 million in sales during the quarter, with Cardioxane contributing $0.3 million. The launch of Totect was impacted by a national shortage of dexrazoxane, resulting in strong initial demand for the product.

Ethyol revenue increased $2.0 million or 394% for the three months ended September 30, 2017 and benefited by increased sales volume.

Kristalose revenue decreased by $0.9 million during the third quarter of 2017 when compared to the prior year period. The product's net revenue was negatively impacted by higher Medicaid rebates that resulted from changes to the products rebate formula effective

January 1, 2017. We also experienced a decrease in sales volumes and an increase in our fee for service paid to wholesalers. These decreases in revenues were slightly offset by improved pricing during the third quarter of 2017.

Omeclamox-Pak revenue decreased $0.6 million primarily due to lower sales volumes as well as increases in managed care rebates and coupon discounts.

Acetadote revenue includes net sales of our Acetadote brand and our share of net sales from our Authorized Generic. During the quarter, there was a $0.2 million decrease in revenue from our Authorized Generic when compared to the prior year period. We experienced a decrease of $0.2 million in our branded Acetadote net revenue from the prior year period.

Caldolor revenue decreased $0.5 million for the three months ended September 30, 2017 primarily due to decreased international sales revenue in the third quarter of 2017 compared to the third quarter of 2016. International sales for the third quarter of 2016 were particularly strong while the third quarter of 2017 was partially impacted by an international shipment that was delivered during the fourth quarter of 2017. The decrease in international sales were partially offset by improvements in domestic net revenue.

Vaprisol revenue decreased $0.1 million during the third quarter of 2017 when compared to the prior year period due to lower sales volumes.

Cost of products sold. Cost of products sold for the third quarter of 2017 increased $0.2 million compared to the prior year as a result of increased sales. Cost of products sold, as a percentage of net revenues, improved to 19.3% during the three months ended September 30, 2017 compared to 22.5% during the three months ended September 30, 2016. This improvement in costs of products sold as a percentage of revenue was attributable to a change in the product sales mix during the quarter compared to the prior year.

Selling and marketing. Selling and marketing expense for the third quarter of 2017 increased $2.6 million compared to the prior year period. This increase was the result of additional royalties, related to increased product sales during the third quarter of 2017.

Research and development. Research and development costs for the third quarter of 2017 were $0.9 million, compared to $0.6 million for the same period last year. A portion of our research and development costs are variable based on the number of trials, study sites and patients involved in the development of our new product candidates. The increase was the result of additional investments in our ongoing clinical and manufacturing initiatives associated with our pipeline products.

General and administrative. General and administrative expense for the third quarter of 2017 was $2.1 million, compared to $1.9 million for the same period last year. The $0.2 million increase from the prior year was primarily driven by increases in legal and other professional fees for all our business development initiatives. There was also an increase in non-cash stock based compensation during the third quarter of 2017.

Amortization. Amortization expense is the ratable use of our capitalized intangible assets including product and license rights, patents, trademarks and patent defense costs. Amortization for both the three months ended September 30, 2017 and the three months ended September 30, 2016 totaled approximately $0.6 million.

Income taxes. Income tax expense for the three months ended September 30, 2017 was less than $0.1 million. As a percentage of income (loss) before income taxes, income tax expense was 0.5% for the three months ended September 30, 2017 compared to 37.5% for the three months ended September 30, 2016. The difference in effective tax rate during the three months ended September 30, 2017 compared to the three months ended September 30, 2016 is a result of recording a full valuation allowance for deferred tax assets during 2017.

As of September 30, 2017, we have approximately $44 million of net operating loss carryforwards resulting from the exercise of nonqualified stock options in 2009 that have historically been used to significantly offset future income tax obligations. Since they were generated during 2009, we have utilized these net operating loss carryforwards to pay minimal income taxes. We will continue to pay minimal income taxes during 2017 and beyond, through the continued utilization of these net operating loss carryforwards, as we are able to achieve taxable income through our operations.

Nine months ended September 30, 2017 compared to the nine months ended September 30, 2016

The following table presents the unaudited interim statements of operations for the nine months ended September 30, 2017 and 2016:

	Nine months ended September 30,		
	2017	2016	Change
Net revenues	$ 29,500,843	$ 23,944,120	$ 5,556,723
Costs and expenses:			
Cost of products sold	5,216,776	4,353,148	863,628
Selling and marketing	16,174,391	10,585,955	5,588,436
Research and development	2,921,951	2,029,914	892,037
General and administrative	6,554,158	5,817,943	736,215
Amortization	1,811,589	1,632,920	178,669
Total costs and expenses	32,678,865	24,419,880	8,258,985
Operating income (loss)	(3,178,022)	(475,760)	(2,702,262)
Interest income	216,849	160,248	56,601
Interest expense	(70,646)	(77,777)	7,131
Income (loss) before income taxes	(3,031,819)	(393,289)	(2,638,530)
Income tax (expense) benefit	(4,196,192)	159,282	(4,355,474)
Net income (loss)	$ (7,228,011)	$ (234,007)	$ (6,994,004)

The following table summarizes net revenues by product for the periods presented:

	Nine months ended September 30,		
	2017	2016	Change
Products:			
Acetadote	$ 4,331,675	$ 5,532,893	$ (1,201,218)
Omeclamox-Pak	1,213,635	2,154,596	(940,961)
Kristalose	8,037,994	10,915,276	(2,877,282)
Vaprisol	1,346,793	1,286,126	60,667
Caldolor	2,762,790	3,060,441	(297,651)
Ethyol	8,325,254	519,400	7,805,854
Totect	2,916,425	—	2,916,425
Other	566,277	475,388	90,889
Total net revenues	$ 29,500,843	$ 23,944,120	$ 5,556,723

Net revenues. Net revenues for the nine months ended September 30, 2017 were $29.5 million compared to $23.9 million for the nine months ended September 30, 2016, representing an increase of $5.6 million, or 23.2%.

Ethyol revenue for the nine months ended September 30, 2017 was $8.3 million, which is an increase of $7.8 million from the nine months ended September 30, 2016. The Company began generating revenue from the sale of Ethyol during the third quarter of 2016.

The Company began shipments of Totect in July of 2017, resulting in $2.9 million in sales during the nine months ended September 30, 2017 with Cardioxane contributing $0.3 million. The launch of Totect was impacted by a national shortage of dexrazoxane, resulting in strong initial demand for the product.

Vaprisol revenue increased $0.1 million during the nine months ended September 30, 2017 compared to the prior year period primarily due to increased sales volume, partially offset by an increase in our fee for service paid to wholesalers and sales returns related to short-dated product.

Kristalose revenue decreased by $2.9 million primarily as a result of reduced sales volume. The product's net revenue was negatively impacted by higher Medicaid rebates due to changes to this products reimbursement. We also experienced an increase in our fee for service paid to wholesalers. This reduction was partially offset by improved pricing during the nine months ended September 30, 2017.

Acetadote revenue included net sales of our branded product and our share of net sales from our Authorized Generic. During the nine months ended September 30, 2017 the Acetadote net revenue included $3.0 million in revenue from sales of our Authorized Generic, compared to $3.5 million for the same period last year. Our branded Acetadote product net revenue decreased $0.7 million due to a reduction in sales volume as a result of generic competition during the nine months ended September 30, 2017.

Omeclamox-Pak revenue decreased $0.9 million during the nine months ended September 30, 2017 compared to the prior year. The decrease was primarily the result of lower sales volume partially offset by improved pricing.

Caldolor revenue experienced a decrease of $0.3 million during the nine months ended September 30, 2017 compared to the same period last year. Caldolor revenue in the nine months ended September 30, 2017 was primarily impacted by decreased international sales revenue. The decrease in international sales were partially offset by improvements in domestic net revenue and lower expired product sales returns.

Cost of products sold. Cost of products sold for the nine months ended September 30, 2017 were $5.2 million, compared to $4.4 million for the same period last year, representing an increase of approximately $0.9 million, or 19.8%. Cost of products sold, as a percentage of net revenues, improved to 17.7% compared to 18.2% during the prior year. This improvement in costs of products sold as a percentage of revenue was attributable to a change in the product sales mix during the period compared to the prior year.

Selling and marketing. Selling and marketing expenses for the nine months ended September 30, 2017 were $16.2 million, compared to $10.6 million for the prior year period, representing an increase of approximately $5.6 million. This increase was the result of additional royalties, related to increased product sales for the nine months ended September 30, 2017.

Research and development. Research and development costs for the nine months ended September 30, 2017 were $2.9 million, compared to $2.0 million for the same period last year, representing an increase of approximately $0.9 million. A portion of our research and development costs are variable based on the number of trials, study sites and patients involved in the development of our product candidates. The increase was the result of additional investments in our ongoing clinical initiatives associated with our pipeline products.

General and administrative. General and administrative expenses were $6.6 million for the nine months ended September 30, 2017, compared to $5.8 million during the same period last year. The $0.7 million increase from the prior year was primarily driven by increases in legal and other professional fees for all our business development initiatives. There was also an increase in non-cash stock based compensation.

Amortization. Amortization expense is the ratable use of our capitalized intangible assets including product and license rights, patents, trademarks and patent defense costs. Amortization for the nine months ended September 30, 2017 totaled approximately $1.8 million, which was an increase of $0.2 million over the prior year. The increase in amortization was attributable to additional product and license rights, capitalized patents and patent defense costs.

Income taxes. Income tax expense for the nine months ended September 30, 2017 totaled $4.2 million, compared to income tax benefit of $0.2 million in the nine months ended September 30, 2016. As a percentage of income (loss) before income taxes, income taxes were 138.4% for the nine months ended September 30, 2017 compared to 40.5% for the nine months ended September 30, 2016. As discussed in Note 7 to our unaudited condensed consolidated interim financial statements, the effective tax rate for the nine months ended September 30, 2017 was primarily impacted by a valuation allowance of $1.0 million for our federal Orphan Drug and Research and Development tax credits and an additional valuation allowance of $3.5 million for our remaining deferred tax assets. These non-cash valuation allowance adjustments impacted our effective tax rate during the nine months ended September 30, 2017.

LIQUIDITY AND CAPITAL RESOURCES

Working Capital

Our primary sources of liquidity are cash flows provided by our operations, the availability under our line of credit 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 and amounts available under our line of credit will be adequate to finance internal growth and fund capital expenditures.

We have historically invested a portion of our cash reserves in variable rate demand notes ("VRDNs") and a portfolio of government-backed securities (including U.S. Treasuries, government-sponsored enterprise debentures and government-sponsored adjustable rate, mortgage-backed securities). The VRDNs are generally issued by municipal governments and are backed by a financial

institution letter of credit. We hold a put right on the VRDNs, which allows us to liquidate the investments relatively quickly (less than one week). The government-backed securities have an active secondary market that generally provides for liquidity in less than one week. At September 30, 2017 and December 31, 2016, we had approximately $8.1 million and $15.6 million, respectively, invested in marketable securities.

The following table summarizes our liquidity and working capital as of September 30, 2017 and December 31, 2016:

	September 30, 2017	December 31, 2016
Cash and cash equivalents	$ 42,018,953	$ 34,510,330
Marketable securities	8,055,017	15,622,111
Total cash, cash equivalents and marketable securities	$ 50,073,970	$ 50,132,441
Working capital (current assets less current liabilities)	$ 50,284,724	$ 50,753,001
Current ratio (multiple of current assets to current liabilities)	4.2	4.4
Revolving line of credit availability	$ 4,000,000	$ 7,900,000

The following table summarizes our net changes in cash and cash equivalents for the nine months ended September 30, 2017 and September 30, 2016:

	Nine months ended September 30,	
	2017	2016
Net cash provided by (used in):		
Operating activities	$ (98,152)	$ (250,316)
Investing activities	6,600,632	(1,619,834)
Financing activities	1,006,143	(786,665)
Net increase (decrease) in cash and cash equivalents	$ 7,508,623	$ (2,656,815)

The net $7.5 million increase in cash and cash equivalents for the nine months ended September 30, 2017 was attributable to cash provided by investing and financing activities offset by cash used in operating activities. Cash used in operating activities of $0.1 million was primarily impacted by a net loss for the period of $7.2 million. These uses of operating cash were offset by deferred tax expenses of $4.3 million and non-cash expenses of depreciation and amortization and share-based compensation expense totaling $2.8 million. Changes in our working capital provided net cash of $0.1 million, including net reductions in accounts payable of $0.6 million offset by a decrease in other inventory and current assets of $0.9 million. Cash provided by investing activities included net proceeds from marketable securities of $7.6 million offset by additions to intangibles of $0.8 million. Our financing activities included $3.9 million in cash provided by borrowings under our line of credit and $2.9 million in cash used to repurchase shares of our common stock.

The net $2.7 million decrease in cash and cash equivalents for the nine months ended September 30, 2016 was attributable to cash used in operating, investing, and financing activities. Cash used in operating activities of $0.3 million was primarily impacted by changes in our working capital of $4.0 million, including net reductions in accounts payable and accrued liabilities of $1.7 million. Cash used in operating activities also includes the net loss for the period of $0.2 million. These uses of operating cash were offset by non-cash expenses of depreciation and amortization and share-based compensation expense totaling $2.4 million. Cash used in investing activities included a net cash investment in our intangible assets of $1.6 million. Our financing activities included $1.9 million in cash used to repurchase shares of our common stock and $2.0 million in cash provided by borrowings under our line of credit.

On July 31, 2017, we entered into a Revolving Credit Loan Agreement with Pinnacle Bank ("Pinnacle Agreement"). The new agreement replaced the June 2014 Revolving Credit Loan Agreement with SunTrust Bank ("SunTrust Agreement") which was to expire on June 30, 2018. The Pinnacle Agreement provides for an aggregate principal amount of up to $20 million and has a three-year term expiring on July 31, 2020. The initial revolving line of credit is up to $12 million with the ability to increase the borrowing amount up to $20 million, upon the satisfaction of certain conditions.

The interest rate on the Pinnacle Agreement is based on LIBOR plus an interest rate spread. There is no LIBOR minimum and the LIBOR pricing provides for an interest rate spread of 1.75% to 2.75% (representing an interest rate of 3.0% at September 30,

2017). In addition, a fee of 0.25% per year is charged on the unused line of credit. Interest and the unused line fee are payable quarterly. Borrowings under the line of credit are collateralized by substantially all of our assets.

Under the Pinnacle Agreement, we are subject to one financial covenant, the maintenance of a Funded Debt Ratio, as such term is defined in the agreement and determined on a quarterly basis. We achieved compliance with the Funded Debt Ratio covenant as of September 30, 2017 through the utilization of the covenant cure section of the agreement.

We had $8.0 million in borrowings under the SunTrust Agreement at September 30, 2017.

OFF-BALANCE SHEET ARRANGEMENTS

During the nine months ended September 30, 2017 and 2016, we did not engage in any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

We are exposed to market risk related to changes in interest rates on our cash on deposit in highly-liquid money market accounts and revolving credit facility. 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. Our investment policy focuses on principal preservation and liquidity.

We believe that our interest rate risk related to our cash and cash equivalents is not material. The risk related to interest rates for these accounts would produce less income than expected if market interest rates fall. Based on current interest rates, we do not believe we are exposed to significant downside risk related to a change in interest on our money market accounts.

We have historically invested in VRDNs and a portfolio of government backed securities (including U.S. Treasuries, government sponsored enterprise debentures and government sponsored adjustable rate mortgage backed securities) to obtain a higher return while preserving our capital. The VRDNs are generally issued by municipal governments and are backed by a financial institution letter of credit. The VRDNs allow us the ability to liquidate the investment relatively quickly (less than one week). The government backed securities have an active secondary market that generally provides for liquidity in less than one week. The primary risk related to interest rates for these accounts are that they will produce less income than expected if market interest rates fall. Based on the $8.1 million in marketable securities outstanding at September 30, 2017, a 1% decrease in the fair value of the securities would result in a reduction in pretax net income (loss) of $0.1 million.

The interest rate related to our revolving credit facility is a variable rate based on LIBOR plus an interest rate spread. As of September 30, 2017, we had $8.0 million in borrowings outstanding under our revolving credit facility.

Exchange Rate Risk

While we operate primarily in the United States, we are exposed to foreign currency risk. A portion of our research and development is performed abroad.

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 a portion of the exposure being limited to 30 days based on the due date of the invoice. Foreign currency exchange gains and losses were immaterial for the nine months ended September 30, 2017 and 2016. 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 principal financial officers evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2017. 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. During the nine months ended September 30, 2017, there has not been any change in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

See the discussion of our Acetadote patent defense legal proceedings contained in *Part 1, Item 1, Business -Trademarks and Patents*, of our Annual Report on Form 10-K for the year ended December 31, 2016, which is incorporated by reference herein.

Item 1A. Risk Factors

Information regarding risk factors appears on pages 24 through 41 in our Annual Report on Form 10-K for the year ended December 31, 2016 under the section titled "Risk Factors." The following risk factor was included in our Form 10-K for the year ended December 31, 2016 and has been updated for recent developments:

Our strategy to secure and extend marketing exclusivity or patent rights may provide only limited or no protection from competition.

We seek to secure and extend marketing exclusivity for our products through a variety of means, including FDA exclusivity and patent rights. Additional barriers for competitors seeking to enter the market include the time and cost associated with the development, regulatory approval and manufacturing of a similar product formulation.

Acetadote is indicated to prevent or lessen hepatic (liver) injury when administered intravenously within eight to ten hours after ingesting quantities of acetaminophen that are potentially toxic to the liver. As discussed in Part I, Item 1, Business - Trademarks, Patents and Proprietary Rights, of this Form 10-K, during April 2012, the United States Patent and Trademark Office (the "USPTO") issued U.S. Patent number 8,148,356 (the "356 Acetadote Patent") which is assigned to us. The claims of the 356 Acetadote Patent encompass the new Acetadote formulation and include composition of matter claims. Following its issuance, the 356 Acetadote Patent was listed in the FDA Orange Book. The 356 Acetadote Patent is scheduled to expire in May 2026, which time period includes a 270-day patent term adjustment granted by the USPTO.

Following the issuance of the 356 Acetadote Patent, we received separate Paragraph IV certification notices from InnoPharma, Inc., Paddock Laboratories, LLC ("Paddock") and Mylan Institutional LLC challenging the 356 Acetadote Patent on the basis of non-infringement and/or invalidity. On May 17, 2012, we responded to the Paragraph IV certification notices by filing three separate lawsuits for infringement of the 356 Acetadote Patent. The first lawsuit was filed against Mylan Institutional LLC and Mylan Inc. ("Mylan") in the United States District Court for the Northern District of Illinois, Eastern Division. The second lawsuit was filed against InnoPharma, Inc. in the United States District Court for the District of Delaware. The third lawsuit was also filed in the United States District Court for the District of Delaware against Paddock and Perrigo Company ("Perrigo"). On May 20, 2012, we received a Paragraph IV certification notice from Sagent Agila LLC challenging the 356 Acetadote Patent. On June 26, 2012, we filed a lawsuit for infringement of the 356 Acetadote Patent against Sagent Agila LLC and Sagent Pharmaceuticals, Inc. ("Sagent") in the United States District Court for the District of Delaware. On July 9, 2012, we received a Paragraph IV certification notice from Perrigo. On August 9, 2012, we filed a lawsuit for infringement of the 356 Acetadote Patent against Perrigo in the United States District Court for the Northern District of Illinois, Eastern Division.

On November 12, 2012, we entered into a Settlement Agreement (the "Settlement Agreement") with Paddock and Perrigo to resolve the challenges and the pending litigation with each of Paddock and Perrigo involving the 356 Acetadote Patent. Under the Settlement Agreement, Paddock and Perrigo admit that the 356 Acetadote Patent is valid and enforceable and that any Paddock or Perrigo generic Acetadote product (with or without EDTA) would infringe upon the 356 Acetadote Patent. In addition, Paddock and Perrigo will not challenge the validity, enforceability, ownership or patentability of the 356 Acetadote Patent through its expiration currently scheduled for May 2026. On November 12, 2012, in connection with the execution of the Settlement Agreement, we entered into a License and Supply Agreement with Paddock and Perrigo (the "License and Supply Agreement"). Under the terms of the License and Supply Agreement, if a third party receives final approval from the FDA for an ANDA to sell a generic Acetadote product and such third party has made such generic version available for purchase in commercial quantities in the United States, we will supply Perrigo with an Authorized Generic version of our Acetadote product.

On May 18, 2012, we also submitted a Citizen Petition to the FDA requesting that the FDA refrain from approving any applications for acetylcysteine injection that contain EDTA, based in part on the FDA's request that we evaluate the reduction or removal of EDTA from its original Acetadote formulation. On November 7, 2012, the FDA responded to the Citizen Petition denying our request and stating that ANDAs referencing Acetadote that contain EDTA may be accepted and approved provided they meet all applicable requirements. We believe this response contradicts the FDA's request to evaluate the reduction or removal of EDTA. On November 8, 2012, we learned that the FDA approved the ANDA referencing Acetadote filed by InnoPharma, Inc. On November 13, 2012, we brought suit against the FDA in the United States District Court for the District of Columbia alleging that the FDA's denial of our Citizen Petition and acceptance for review and approval of any InnoPharma, Inc. product containing EDTA was arbitrary and in violation of law.

We found during the resulting legal proceedings that the FDA initially concluded that the original Acetadote formulation was withdrawn for safety reasons and no generic versions should be approved. The FDA later reversed its position based on the

possibility of drug shortages and the presence of EDTA in other formulations. At the same time, the FDA noted that exclusively marketing a non-EDTA containing product would be preferable because it would eliminate the potential risk of EDTA.

On January 7, 2013, Perrigo announced initial distribution of our Authorized Generic acetylcysteine injection product.

On March 19, 2013, the USPTO issued U.S. Patent number 8,399,445 (the "445 Acetadote Patent") which is also assigned to us. The claims of the 445 Acetadote Patent encompass the use of the 200 mg/ml Acetadote formulation to treat patients with acetaminophen overdose. On April 8, 2013, the 445 Acetadote Patent was listed in the FDA Orange Book. The 445 Acetadote Patent is scheduled to expire in August 2025. Following the issuance of the 445 Acetadote Patent we have received separate Paragraph IV certification notices from Perrigo, Sagent, and Mylan challenging the 445 Acetadote Patent on the basis of non-infringement, unenforceability and/or invalidity.

On June 10, 2013, we became aware of a Paragraph IV certification notice from Akorn, Inc. challenging the 445 Acetadote Patent and the 356 Acetadote Patent on the basis of non-infringement. On July 12, 2013, we filed a lawsuit for infringement of the 356 Acetadote Patent against Akorn, Inc. in the United States District Court for the District of Delaware.

On June 10, 2013, we announced that the FDA approved updated labeling for Acetadote. The new labeling revises the product's indication and offers new dosing guidance for specific patient populations.

On September 30, 2013, the United States District Court for the District of Columbia filed an opinion granting a Summary Judgment in favor of the FDA regarding Cumberland's November 13, 2012 suit. On November 1, 2013, the United States District Court for the District of Delaware filed opinions granting Sagent's and InnoPharma's motions to dismiss our May 2012 and June 2012 suits.

On February 18, 2014, the USPTO issued U.S. Patent number 8,653,061 (the "061 Acetadote Patent") which is assigned to us. The claims of the 061 Acetadote Patent encompass the use of the 200 mg/ml Acetadote formulation to treat patients with acetaminophen overdose. Following its issuance, the 061 Acetadote Patent was listed in the FDA Orange Book. The 061 Acetadote Patent is scheduled to expire in August 2025.

On May 13, 2014, the USPTO issued U.S. Patent number 8,722,738 (the "738 Acetadote Patent") which is assigned to us. The claims of the 738 Acetadote Patent encompass administration methods of acetylcysteine injection, without specification of the presence or lack of EDTA in the injection. Following its issuance, the 738 Acetadote Patent was listed in the FDA Orange Book and it is scheduled to expire in April 2032.

On December 11, 2014 and March 3, 2015, we became aware of Paragraph IV certification notices from Aurobindo Pharma Limited and Zydus Pharmaceuticals (USA) Inc., respectively, challenging the 356, 445, 061, and 738 Acetadote Patents on the basis of non-infringement.

By statute, where the Paragraph IV certification is to a patent timely listed before an Abbreviated New Drug Application ("ANDA") is filed, a company has 45 days to institute a patent infringement lawsuit during which period the FDA may not approve another application. In addition, such a lawsuit for patent infringement filed within such 45-day period may stay, or bar, the FDA from approving another product application for two and a half years or until a district court decision that is adverse to the asserted patents, whichever is earlier.

On February 10, 2015, the USPTO issued U.S. Patent number 8,952,065 (the "065 Acetadote Patent") which is assigned to us. The claims of the 065 Acetadote Patent encompass the use of the 200 mg/ml Acetadote formulation to treat patients with acute liver failure. The 065 Acetadote Patent is scheduled to expire in August 2025.

On September 30, 2015, the United States District Court for the Northern District of Illinois, Eastern Division ("District Court") ruled in our favor in our lawsuit against Mylan for infringement of the 445 Acetadote Patent. The opinion upheld our 445 Acetadote Patent and expressly rejected Mylan's validity challenge. The District Court ruled that Mylan is liable to us for infringement of the 445 Acetadote patent in light of Mylan's Abbreviated New Drug Application in which Mylan sought to market a generic version of Acetadote. On November 17, 2015, the District Court entered an order enjoining Mylan and its affiliates from selling or using its generic version of Acetadote until August 2025, the date of expiration of the 445 Acetadote Patent. On October 30, 2015, Mylan filed a notice of appeal to the U.S. Court of Appeals for the Federal Circuit, (the "Appeals Court").

On May 3, 2016, the USPTO issued U.S. Patent number 9,327,028 (the "028 Acetadote Patent") which is assigned to us. The claims of the 028 Acetadote Patent encompass administration methods of acetylcysteine injection, without specification of the presence or lack of EDTA in the injection. Following its issuance, the 028 Acetadote Patent was listed in the FDA Orange Book and is scheduled to expire in July 2031.

On January 26, 2017, the Appeals Court affirmed the District Court ruling in our favor in our lawsuit against Mylan for infringement of the 445 Acetadote Patent. The Appeals Court opinion affirmed the District Court's ruling upholding our 445 Acetadote Patent and expressly rejected Mylan's validity challenge.

On November 3, 2017, we became aware of a Paragraph IV certification notice from Exela Pharma Sciences, LLC challenging the 356, 445, 061, 738, and 028 Acetadote Patents on the basis of non-infringement.

We also have additional patent applications relating to Acetadote which are pending with the USPTO and may or may not be issued. We intend to continue to vigorously defend and protect our Acetadote product and related intellectual property rights. If we are unsuccessful in protecting our Acetadote intellectual property rights, our competitors may be able to introduce products into the marketplace that reduce the sales and market share of our Acetadote product which may require us to take measures such as reducing prices or increasing our marketing expense, any of which may result in a material adverse effect to our financial condition and results of operations.

We have U.S. patents and related international patents which include composition of matter claims that encompass the Caldolor formulation, including methods of treating pain using intravenous ibuprofen and claims directed to ibuprofen solution formulations, methods of making the same, and methods of using the same, and which are related to our formulation and manufacture of Caldolor. Additionally, the active ingredient in Caldolor, ibuprofen, is in the public domain, and a competitor could try to develop, test and seek FDA approval for a sufficiently distinct formulation for another ibuprofen product that competes with Caldolor. The U.S. patents are listed in the FDA Orange Book, with one expiring in November 2021, six others expiring in September 2029 and one other expiring in September 2030. On November 20, 2015, the FDA awarded three years of marketing exclusivity to Caldolor in connection with the approval of the Caldolor supplemental new drug application. Such exclusivity extends through November 20, 2018.

We have numerous U.S. patents and related international patents for Vaprisol. These patents were acquired in our February 2014 acquisition of certain product rights, intellectual property and related assets of Vaprisol from Astellas. The primary patent is U.S. Patent No. 5,723,606 (the "606 Vaprisol Patent") which includes composition of matter claims that encompass the Vaprisol formulation as well as methods for the intravenous treatment of patients with euvolemic hyponatremia. The 606 Vaprisol Patent is listed in the FDA Orange Book and expires in December 2019.

While we consider patent protection when evaluating product acquisition opportunities, any products we acquire in the future may not have significant patent protection. Neither the USPTO nor the courts have a consistent policy regarding the breadth of claims allowed or the degree of protection afforded under many pharmaceutical patents. Patent applications in the U.S. and many foreign jurisdictions are typically not published until 18 months following the filing date of the first related application, and in some cases not at all. In addition, publication of discoveries in scientific literature often lags significantly behind actual discoveries. Therefore, neither we nor our licensors can be certain that we or they were the first to make the inventions claimed in our issued patents or pending patent applications, or that we or they were the first to file for protection of the inventions set forth in these patent applications. In addition, changes in either patent laws or in interpretations of patent laws in the U.S. and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection. Furthermore, our competitors may independently develop similar technologies or duplicate technology developed by us in a manner that does not infringe our patents or other intellectual property. As a result of these factors, our patent rights may not provide any commercially valuable protection from competing products.

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

Purchases of Equity Securities

We currently have a share repurchase program to purchase up to $10.0 million of our common stock pursuant to Rule 10b-18 of the Securities Exchange Act. In January 2016, our Board of Directors established the current $10.0 million repurchase program to replace the prior authorizations for repurchases of our outstanding common stock.

The following table summarizes the activity, by month, during the three months ended September 30, 2017:

Period	Total Number of Shares (or Units) 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 Plans or Programs (1)
July	35,392		$ 7.03	35,392	$ 5,477,764
August	78,948	(1)	6.77	78,948	4,943,079
September	41,519		7.04	41,519	4,650,608
Total	155,859			155,859	

(1) Of this amount, 36,000 shares were repurchased directly through private purchases at the then-current fair market value of common stock.

Item 6. Exhibits

No.	Description
10.34	Revolving Credit Loan Agreement, dated July 31, 2017, by and between Cumberland Pharmaceuticals Inc. and Pinnacle Bank.
31.1	Certification of Chief Executive 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.
31.2	Certification of Chief 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.
101.INS	XBRL INSTANCE DOCUMENT
101.SCH	XBRL TAXONOMY EXTENSION SCHEMA DOCUMENT
101.CAL	XBRL TAXONOMY EXTENSION CALCULATION LINKBASE DOCUMENT
101.DEF	XBRL TAXONOMY EXTENSION DEFINITION LINKBASE DOCUMENT
101.LAB	XBRL TAXONOMY EXTENSION LABEL LINKBASE DOCUMENT
101.PRE	XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE DOCUMENT

SIGNATURES

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

Cumberland Pharmaceuticals Inc.

November 8, 2017

By: */s/ Michael Bonner*
Michael Bonner
Chief Financial Officer

REVOLVING CREDIT LOAN AGREEMENT

THIS REVOLVING CREDIT LOAN AGREEMENT (this "**Loan Agreement**") is made and entered into as of July 28, 2017 by and between CUMBERLAND PHARMACEUTICALS INC., a Tennessee corporation (the "**Borrower**"), and PINNACLE BANK, a Tennessee banking corporation (the "**Lender**").

RECITALS:

A. The Borrower has requested that the Lender extend it a revolving credit facility.

B. The Lender is willing to extend the revolving credit facility to Borrower pursuant to the terms of this Agreement and the Loan Documents (as such term is defined herein).

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Borrower and the Lender agree as follows:

ARTICLE I
LOAN

1.1 Loan.

(a) Loan. Subject to the Conditions Precedent and the other terms and conditions contained in this Agreement and in the other Loan Documents, and in reliance upon the representations, warranties and covenants in this Agreement and the other Loan Documents, Lender agrees to make Advances to Borrower on a revolving credit basis up to $12,000,000.00 from time to time until the Maturity Date, as evidenced by and pursuant to the Note.

(b) Advances. The Borrower shall comply with the terms of Section 1.3 herein and this Agreement concerning the procedure to follow when requesting an Advance under the Note.

1.2 Interest. Interest shall accrue on all amounts advanced under the Note at LIBOR, plus the Applicable Margin, as described within the Note, except that interest shall accrue at the Default Rate following the occurrence of an Event of Default (regardless of whether notice thereof has been given to Borrower).

1.3 Borrowing Procedures for the Loan. The Borrower shall give the Lender written notice requesting an Advance (or telephonic notice promptly confirmed in writing), substantially in the form and substance acceptable to Lender (a "**Notice of Revolving Borrowing**"), prior to 11:00 a.m. (Nashville Time) on the requested date of each Advance. Each Notice of Revolving Borrowing shall be irrevocable and shall specify (i) the aggregate principal amount of such Advance, and (ii) the date of such Advance (which shall be a Business Day). If such request is received prior to 11:00 a.m. (Nashville Time), Lender shall use its best efforts to fund an Advance on the same day. Borrower acknowledges that Lender may be delayed in funding an Advance because of the need to confirm the dollar-for-dollar collateralization requirements.

1.4 Use of Proceeds. Proceeds of the Note shall be used for working capital and general corporate purposes.

1.5 Payments to Lender's Office; Right of Offset. Each payment under the Note shall be made to Lender at Lender's office for the account of Lender in United States currency on the date such payment is due. Lender may, but shall not be obligated to, debit the amount of any such payment that is not made by such time to any ordinary deposit account of Borrower with Lender (excluding any accounts held in Borrower's name as a trustee or fiduciary). Lender shall promptly notify Borrower of any such setoff, but Lender's failure to give such notice shall not affect the validity thereof.

1.6 Fees.

(a) Commitment Fee. The Borrower shall pay to the Lender a commitment fee related to the loan evidenced by the Note in the amount equal to $30,000.00.

(b) Non-Use Fee. Commencing with the quarter ending on September 30, 2017 and on the last day of each consecutive March, June, September, and December, until and including the Maturity Date, the Borrower shall pay to Lender a fee equal to twenty-five (25) basis points of the average unused availability under the Note during the preceding calendar quarter, such fee to be prorated for any partial quarter; provided that if the principal amount of the Note is increased, then the twenty-five (25) basis points non-use fee shall be calculated to include the unused portion of the increased principal amount. The non-use fee shall be calculated within fifteen (15) days of each quarter end and shall be immediately paid by Borrower upon notice of such amount.

1.7 Increase of Availability Under Note. Provided that no Default or Event of Default under the Note exists or is threatened, the Borrower, from time to time, may request in writing that the Lender increase the principal amount available under the Note by an aggregate principal amount of up to an additional $8,000,000.00; provided that the Lender in the exercise of its sole discretion shall determine whether it will or will not fund any requested increase. In connection with any request by the Borrower for an increase, the following shall apply:

(a) each approved increase must be in a minimum amount of no less than $1,000,000.00;

(b) no request for an increase shall be delivered to Lender less than ninety (90) days prior to the Maturity Date;

(c) the Borrower's request to the Lender for an increase shall be made in writing at least thirty (30) Business Days prior to the date the Borrower desires the requested increase to be funded and in connection with any such written request the Borrower shall submit:

(i) the purpose for the increase,

(ii) Borrower's calculations, including pro-forma calculations, establishing to Lender's satisfaction that none of the financial covenants set forth in the Loan Documents have been violated, nor will such be violated immediately after any approved funding, and

(iii) Borrower's certification that all representations and warranties contained in the Loan Documents are true and correct as of the date of the request, and that no Default or Events of Default under the Loan Documents exist or are threatened.

The Lender shall review the request by Borrower for an increase in funding, and the Lender, in the exercise of its sole discretion, shall determine whether to approve any request. In the event the Lender elects to fund any requested increase, Borrower shall:

(a) cause the Lender to receive, at Borrower's expense, satisfactory evidence that the lien and security interest against the Collateral remains a first perfected security interest in favor of Lender, subject to no encumbrance objectionable to Lender;

(b) cause the Lender to receive all loan documentation required by Lender to evidence the increase, including without limitation, such loan documentation as required to insure that all guaranties and security agreements include the increase;

(c) pay to Lender all costs and expenses incurred by Lender in connection with the increase, including, without limitation, indebtedness tax, UCC filing costs, and attorney fees; and

(d) pay to Lender a loan fee equal to ten (10) basis points of the amount by which the Note is increased.

1.8 Usury. The parties to this Agreement intend to conform strictly to applicable usury laws as presently in effect. Accordingly, if the transactions contemplated hereby would be usurious under applicable law (including the laws of the United States of America and the State of Tennessee), then, in that event, notwithstanding anything to the contrary in any Loan Document, Borrower and Lender agree as follows: (a) the aggregate of all consideration that constitutes interest under applicable law which is contracted for, charged or received under any of the Loan Documents or otherwise in connection with the Indebtedness, shall under no circumstance exceed the amount collectible at the maximum lawful rate of interest permitted by applicable law, and any excess shall be credited on the Indebtedness by the holder thereof (or, if the Indebtedness shall have been paid in full, refunded to Borrower); and (b) if the maturity of the Indebtedness is accelerated by reason of an election of the holder resulting from any Event of Default or otherwise, or in the event of any required or permitted prepayment, then such consideration that constitutes interest may never include more than the maximum amount of interest permitted by applicable law, and excess interest, if any, for which this Agreement provides, or otherwise, shall be canceled automatically as of the date of such acceleration or prepayment and, if previously paid, shall be credited against the Indebtedness (or, if the Indebtedness shall have been paid in full, refunded to Borrower).

ARTICLE II
COLLATERAL AND GUARANTIES

2.1 Collateral.

(a) The Obligations shall be secured by a first-priority, perfected security interest in all of the presently existing and hereafter acquired assets of the Borrower and all Guarantors, including, without limitation, their respective accounts, accounts receivable, payments, furniture, equipment, inventory, machinery, general intangibles (including Equity Interests), chattel paper, instruments, documents, contract rights, choses in action, corporate or other business records, marketable securities, stock and other securities, brokerage accounts, depository accounts, cash, cash equivalents, intellectual property rights, trademarks, copyrights, patents, patent applications, trade secrets, goodwill, registrations, licenses, franchises, customer lists, tax refund claims, computer programs, tort claims, and proceeds arising out of or in connection with the foregoing all as evidenced by security agreements, UCC financing statements, and any other documentation, all as evidenced by, and described in more detail in, the Security Documents.

(b) The Obligations shall be secured by all Property hereafter pledged and delivered to Lender to secure the Obligations, and all Property in which any Person has granted or hereafter grants Lender a lien or security interest to secure the Obligations.

2.2 Guaranties. The Obligations shall be jointly and severally guaranteed by the Guarantors.

2.3 Cross-Collateralization. Any and all Collateral described in Section 2.1 above shall stand as security and collateral for all Obligations of the Borrower and Guarantors to Lender, whether incurred pursuant to the terms of the Loan Documents or otherwise, and whether presently existing or hereafter incurred. This cross-collateralization provision is a material factor in Lender's willingness to enter into this Agreement and to extend credit hereunder.

ARTICLE III
REPRESENTATIONS AND WARRANTIES

To induce Lender to enter this Agreement and extend credit under this Agreement, Borrower covenants, represents, and warrants to Lender that as of the date hereof and as of the Closing Date:

3.1 Existence and Qualification. Borrower is a corporation, legally existing and in good standing under the laws of the State of Tennessee, and is duly qualified to do business in each jurisdiction in which a failure to be so qualified would have a Material Adverse Effect. All Guarantors are duly existing and validly formed in the state of their formation, and all Guarantors are duly qualified to do business in each jurisdiction in which a failure to be so qualified would have a Material Adverse Effect.

3.2 Power and Authorization. The Borrower and the Guarantors are duly authorized and empowered to execute, deliver, and perform under all Loan Documents to which each is a party, in accordance with their respective organizational documents.

3.3 Binding Obligations. This Agreement is, and the Note and other Loan Documents to which each is a party when executed and delivered in accordance with this Agreement will be, legal, valid and binding upon and against the Borrower and the Guarantors, as applicable, and their respective Properties, enforceable in accordance with their respective terms, subject to no defense, counterclaim, set-off, or objection of any kind.

3.4 No Legal Bar or Resultant Lien. The execution, delivery and performance of the Loan Documents by the Borrower and each Guarantor does not constitute a default under, and will not violate any provisions of the organizational documents of the Borrower or any Guarantor or any contract, agreement, law, regulation, order, injunction, judgment, decree, or writ to which the Borrower or any Guarantor is subject, nor result in the creation or imposition of any lien upon any Properties of Borrower or any Guarantor, other than those contemplated by the Loan Documents.

3.5 No Consent. The execution, delivery, and performance of the Loan Documents by the Borrower and each Guarantor does not require the consent or approval of any other Person, if the failure to obtain the same would have a Material Adverse Effect.

3.6 Financial Condition. The audited consolidated financial statements of the Borrower and each Guarantor for the fiscal year ended December 31, 2016, were prepared in accordance with GAAP, consistently applied, and such financial statements present fairly the financial condition of the Borrower and each Guarantor, as applicable, as of the date or dates and for the period or periods stated therein, subject to finalizing adjustments determined not to be material. No Material Adverse Change has occurred since the date of such financial statements.

3.7 Litigation. There is no litigation, legal or administrative proceeding, investigation, or other action of any nature pending or, to the knowledge of the Borrower, threatened against or affecting the Borrower or any Guarantor that involves the possibility of any judgment or liability not fully covered by insurance and that may have a Material Adverse Effect on the business or the Properties of the Borrower or any Guarantor or their respective ability to carry on their respective business as now conducted.

3.8 Taxes; Governmental Charges. The Borrower and each Guarantor have filed or caused to be filed all tax returns and reports required to be filed. The Borrower and each Guarantor have paid all due and payable taxes, assessments, fees, and other governmental charges levied upon them or upon any of their respective Properties or income including interest and penalties. Borrower and each Guarantor have made all required withholding deposits.

3.9 Title, Etc. Borrower and each Guarantor have good title to the Collateral, free and clear of all liens except those securing the Indebtedness and Permitted Liens. Neither the Borrower nor any of the Guarantors own any real property.

3.10 Intellectual Property. Except to the extent that a failure to do so will not have a Material Adverse Effect, the Borrower and each Guarantor possess or have the right to use all trademarks, service marks, copyrights, trade names, patents, licenses, and other intellectual property, and rights therein, as are necessary for the conduct of its business as now conducted and presently proposed to be conducted, without conflict with the rights or claimed rights of others.

3.11 No Default. Except to the extent that the same will not have a Material Adverse Effect, neither the Borrower nor any Guarantor is in default in any respect that affects its business, Properties, operations, or condition, financial or otherwise, under any indenture, mortgage, deed of trust, credit agreement, note, agreement, or other instrument to which the Borrower and any Guarantor is a party or by which it or their Properties are bound. Neither the Borrower nor any Guarantor is in violation of its organizational documents.

3.12 Casualties; Taking of Properties, Etc. Neither the business nor the Properties of the Borrower and any Guarantor have been affected as a result of any fire, explosion, earthquake, flood, drought, windstorm, accident, strike or other labor disturbance, embargo, requisition or taking of property, cancellation of contracts, permits, concessions by any domestic or foreign government or any agency thereof, riot, activities of armed forces or acts of God or of any public enemy in such a way as to have a Material Adverse Effect.

3.13 Compliance with Laws, Etc. Except to the extent the same will not have a Material Adverse Effect, neither the Borrower nor any Guarantor is in violation of any law, judgment, decree, order, ordinance, or governmental rule or regulation to which the Borrower or any Guarantor or any of their respective Properties is subject, including without limitation any Environmental Law. Neither the Borrower nor any Guarantor has failed to obtain any material license, permit, franchise, or other governmental authorization necessary to the ownership of any of their respective Properties or to the conduct of their respective business.

3.14 ERISA. The Borrower and all Guarantors are in compliance in all material respects with the applicable provisions of ERISA. Neither the Borrower nor any Guarantor has incurred any material "**accumulated funding deficiency**" within the meaning of ERISA, and has not incurred any material liability to PBGC in connection with any Plan.

3.15 Trade Names. Neither the Borrower nor any Guarantor uses any trade names (and have not used any since the date of their respective formation).

3.16 Subsidiaries. The only Subsidiaries of the Borrower is the Guarantor and Cumberland Emerging Technologies, Inc.

3.17 Loans to Others. Neither the Borrower nor any Guarantor has made a loan to any board member, shareholder, officer, employee, or any other Person.

3.18 Leases and/or Warehouse Agreements. The locations at which the Borrower and/or any Guarantor maintain any portion of the Collateral are described on Schedule 3.18 hereof. Schedule 3.18 also identifies all leases and/or storage agreements related to such locations.

ARTICLE IV
CONDITIONS PRECEDENT

4.1 Initial Conditions. Lender's obligation to enter into this Agreement is subject to the Conditions Precedent that Lender shall have received (or agreed in writing to waive or defer receipt of) all of the following, each duly executed, dated and delivered as of the Closing Date, in form and substance satisfactory to Lender and its counsel:

(a) Note and Loan Documents. The Note, issued by Borrower and payable to the order of Lender, and all other Loan Documents, all duly executed by the Borrower and the Guarantors, as applicable;

(b) Resolutions. Certified copies of resolution of the applicable governing body of the Borrower and the Guarantors authorizing the execution, delivery, and performance, respectively, of this Agreement and all Loan Documents;

(c) Certificate of Existence. A certificate of existence regarding the Borrower and all Guarantors certified by the Secretary of State of the formation of such Borrower and/or Guarantors, containing no facts objectionable to Lender, together with appropriate certificates of authorization to do business in the State of Tennessee and any other states in which the Borrower or any Guarantor is required to qualify to do business;

(d) Organizational Documents. Copies of the organizational documents of Borrower and the Guarantors, certified by the secretary of each;

(e) UCC-11 Reports. UCC-11 Reports containing no matter objectionable to Lender.

(f) Opinion Letter. An opinion letter from counsel to the Borrower and the Guarantors in form and substance acceptable to Lender;

(g) Insurance. Evidence that all insurance required by Lender under this Agreement and any other Loan Document is in place and effective (including, without limitation, any required flood insurance);

(h) W-9, Etc. An executed W-9 form for the Borrower and each Guarantor and all documentation necessary to comply with the Patriot Act, including, without limitation, copies of the driver's license of each Individual Guarantor;

(i) Year-End Financials. Delivery to and approval by Lender of the Borrower's annual audited consolidated financial statements for the fiscal year ending on December 31, 2016;

(j) Payoff Letters. Payoff letters from SunTrust Bank in form and substance satisfactory to Lender;

(k) Other. Such other documents as Lender may reasonably request.

4.2 All Advances. After the Closing Date, Lender's obligation to make Advances under the Note is subject to the following additional Conditions Precedent, which must be satisfied each time an Advance is requested:

(a) Representations. The representations of the Borrower contained in Article III shall be true and correct as of the date of the requested Advance, except as to (i) representations and warranties expressly made as of a specified date, which shall remain true and correct as of such specified date, and (ii) changes occurring after the Closing Date caused by transactions permitted under the Loan Agreement;

(b) Material Adverse Event. No Material Adverse Event has occurred and is continuing; and

(c) No Default. No Default or Event of Default has occurred and continues to exist.

ARTICLE V
AFFIRMATIVE COVENANTS

Borrower covenants that, during the term of this Agreement (including any extensions hereof) and until all Indebtedness shall have been finally paid in full and all Indebtedness shall have been fully discharged, unless Lender shall otherwise first consent in writing, the Borrower shall:

5.1 Financial Statements and Reports. Promptly furnish to Lender:

(a) Annual Reports. As soon as available, and in any event within one hundred fifty (150) days after the close of each fiscal year end of the Borrower, cause the Lender to receive the annual audited consolidated financial statements of the Borrower, certified by BDO USA or another independent registered public accounting firm approved by Lender in its reasonable discretion, which financial statements set forth the balance sheet, related statements of income, and cash flows as at the end of such year, all prepared in accordance with GAAP;

(b) Quarterly Reports. As soon as available and in any event within forty-five (45) days of each quarter end, cause to be delivered to Lender the company prepared consolidated financial statements of the Borrower, setting forth the balance sheet of the Borrower and the related statements of income, and cash flows as of the end of such quarter, all prepared in accordance with GAAP and certified by the Borrower's chief financial officer as being true and accurate;

(c) Compliance Certificate. As soon as available, and in any event within forty-five (45) days of the last day of the end of each fiscal quarter, the Borrower shall deliver to Lender a Compliance Certificate evidencing Borrower's compliance or noncompliance with the financial covenant(s) set forth herein;

(d) Rule 10b5-1 Trading Plan. As soon as available and in any event within fifteen (15) days of each quarter end, cause to be delivered to Lender (i) copies of its Rule 10b5-1 trading plan, and (ii) a summary of any repurchase or redemption during the prior fiscal quarter outside the parameters of any applicable Rule 10b5-1 trading plan.

(e) Other Information. Promptly upon its becoming available, deliver such other material information about Borrower, the Guarantors, the Collateral, or the Indebtedness as Lender may reasonably request from time to time.

5.2 Taxes and Other Liens. Pay and discharge, and cause each Guarantor to pay and discharge, prior to delinquency, all taxes, assessments, and governmental charges or levies imposed upon it or upon any of its income or Property as well as all claims of any kind (including claims for labor, materials, supplies, and rent) which, if unpaid, might become a Lien upon any or all of its Property; provided, however, that neither the Borrower nor any Guarantor shall be required to pay any such tax, assessment, charge, levy, or claim if the amount, applicability, or validity thereof shall currently be contested in good faith by appropriate proceedings diligently conducted, no Lien attaches to any of the Property of Borrower and/or any Guarantor or Borrower or any Guarantor, as applicable, has established reserves therefor adequate under GAAP.

5.3 Maintenance. Maintain, and cause each Guarantor to maintain, their respective organizational existence, name, rights, and franchises.

5.4 Further Assurances. Promptly cure, and cause each Guarantor to cure, any defects in the creation, issuance, and delivery of the Loan Documents to which it is a party. Borrower at its expense promptly will execute and deliver, and cause each Guarantor to execute and deliver, to Lender upon request all other and further documents, agreements, and instruments reasonably required in order to comply with or accomplish the covenants and agreements of the Borrower and all Guarantors in the Loan Documents, or to evidence further and to describe more fully any Collateral intended as security for the Indebtedness or to correct any omissions in the Loan Documents, or to state more fully the Indebtedness and agreements set out in any of the Loan Documents, or to perfect, protect, or preserve any Liens created pursuant to any of the Loan Documents, or to make any recordings, to file any notices or to obtain any consents as may be reasonably necessary or appropriate in connection therewith.

5.5 Accounts and Records. Keep books of record and account, and cause each Guarantor to keep books of record and account, in which full, true, and correct entries will be made of all dealings or transactions in accordance with GAAP, except only for changes in accounting principles or practices with which Borrower's certified public accountants concur and which changes have been reported to Lender in writing and with an explanation thereof.

5.6 Notice of Certain Events. Promptly give to Lender, if Borrower learns of the occurrence of any of the following events, notice of (a) any event that constitutes a Default or an Event of Default, together with a detailed statement by a responsible officer of the Borrower of the steps being taken as a result thereof; or (b) the receipt of any notice from, or the taking of any other action by, the holder of any promissory note, debenture, or other evidence of Debt of the Borrower and/or any Guarantor or of any security (as defined under the Securities Act of 1933, as amended) of the Borrower and/or any Guarantor with respect to a claimed default, together with a detailed statement by a responsible officer of the Borrower and/or any Guarantor specifying the notice given or other action taken by such holder and the nature of the claimed default and what action the Borrower and/or any Guarantor is taking or proposes to take with respect thereto; or (c) any legal, judicial, or regulatory proceedings affecting the Borrower or any Guarantor in which the amount involved is material and is not covered by insurance or which, if adversely determined, would have a Material Adverse Effect; or (d) any dispute between the Borrower or any Guarantor and any governmental or regulatory authority or any other person, entity, or agency which, if adversely determined, would have a Material Adverse Effect; or (e) a change to the position of Chief Executive Officer of the Borrower at least 30 days prior to the effective date of such change; or (f) any Material Adverse Change, either individually or in the aggregate, in the assets, liabilities, financial condition, business, operations, affairs, or circumstances of the Borrower from those reflected in the financial statements of the Borrower delivered to Lender pursuant to this Agreement or from the facts warranted or represented in any Loan Document.

5.7 Compliance with Laws. Observe and comply, and cause each Guarantor to observe and comply, (to the extent necessary so that any failure will not have a Material Adverse Effect) with all applicable laws, statutes, codes, acts, ordinances, orders, judgments, decrees, injunctions, rules, regulations, certificates, franchises, permits, licenses, authorizations, and requirements of all federal, state, county, municipal, and other governments, including without limitation all Environmental Laws.

5.8 ERISA Information and Compliance. Except to the extent that a failure to do so will not have a Material Adverse Effect, comply, and cause each Guarantor to comply, with ERISA and all other applicable laws governing any pension or profit sharing plan or arrangement to which the Borrower or any Guarantor is a party or is otherwise subject. The Borrower and any Guarantor shall provide Lender with notice of any "**reportable event**" or "**prohibited transaction**" or the imposition of a "**withdrawal liability**" within the meaning of ERISA.

5.9 Insurance. Obtain and maintain in full force and effective the following:

(a) Hazard insurance, including, without limitation, coverage for fire, vandalism, malicious mischief, earthquake, and windstorm damage, which insurance: (i) must be issued by an insurance company reasonably acceptable to Lender and licensed to transact business in Tennessee, (ii) must contain a standard mortgagee clause designating the Lender, its successors and assigns, as additional insured, and (iii) must contain provisions for written notice to Lender at least thirty (30) days prior to any cancellation, termination, or modification thereof or of any coverage, provided that if such cancellation or termination is due to non-payment of premiums, the time period for such notice may not be less than ten (10) days;

(b) Public liability insurance issued by an insurance company acceptable to Lender in such amounts and containing such terms as acceptable to Lender, naming Lender as an additional insured; and

(c) All such other insurance as required by the provisions of any other Loan Documents.

ARTICLE VI
NEGATIVE COVENANTS

The Borrower covenants and agrees that, during the term of this Agreement and until all Indebtedness shall have been finally paid in full and all Indebtedness shall have been fully discharged, unless Lender shall otherwise first consent in writing, Borrower will not, nor will Borrower permit any Guarantor, either directly or indirectly:

6.1 Nature of Business. Suffer or permit any Material Adverse Change to be made in the character of the business it or any Guarantor engages in as of the Closing Date.

6.2 Mergers, Etc. Merge or consolidate, or allow any Guarantor to merge or consolidate, with or into any other Person except through a permitted Acquisition and unless the Borrower or such Guarantor is the surviving entity.

6.3 Proceeds of Loan. Permit the proceeds of the Loan to be used for any purpose other than those permitted under this Agreement.

6.4 Change in Control. Permit any Change in Control of Borrower or any Guarantor.

6.5 Notice of Additional Debt. Incur or permit any of the Guarantors to incur any additional Debt without Lender's prior written consent with the exception of unsecured borrowings, purchase money loans, and capital lease obligations less than $2,000,000 in the aggregate for the Borrower and the Guarantors combined in any fiscal year; provided that, prior to any such additional Debt, Borrower shall provide evidence satisfactory to Lender, in form and substance, that no Event of Default will occur or shall be threatened as a result of the incurrence of such additional Debt.

6.6 Liens. Voluntarily or involuntarily permit, or allow any Guarantor to permit, any lien or encumbrance to attach to its assets excluding liens in favor of Lender and Liens securing any purchase money Debt permitted under Section 6.5 above.

6.7 Funded Debt Ratio. Permit the Funded Debt Ratio of the Borrower as calculated for the Borrower and its Subsidiaries at the end of each fiscal quarter on a rolling four quarter basis to exceed 2.50 to 1.00.

6.8 Subsidiaries. Create or acquire any Subsidiary except through a permitted Acquisition; provided that if the Lender, in its discretion, consents to the creation or acquisition of any Subsidiary, then

such approved Subsidiary shall be required to execute and provide such documentation as required by Lender to become a Guarantor hereunder and to grant a first perfected security interest in favor of Lender in all of its assets to secure repayment by Borrower of all Indebtedness.

6.9 Loans, Advances to Others, Etc. Take, or permit any Guarantor to take, any of the following actions: (a) extend a loan to any Person, or (b) make an investment in any Person other than in a Subsidiary that becomes a Guarantor and that grants a first perfected security interest in its assets in favor of Lender; provided, however, that Cumberland Emerging Technologies Inc. is not required to become a Guarantor or grant any such security interest in favor of Lender.

6.10 Sale of Assets. Sell or transfer any assets to any Person (i) outside the ordinary course of business or (ii) in excess of $100,000 in the aggregate in any fiscal year.

6.11 Dividends and Repurchase or Redemption of Stock. Borrower shall not be permitted to pay dividends or to repurchase or redeem shares of its stock or that of any Subsidiary except that Borrower may pay dividends or repurchase or redeem such stock in an aggregate amount of no more than $12,000,000 during any three-year period beginning with the closing date; provided that this Section 6.11 shall not apply to dividends or repurchases or redemptions of stock of Cumberland Emerging Technologies Inc.

6.12 Acquisition. Borrower may not make any Acquisition, unless: (a) no Default or Event of Default under the Note has occurred or is threatened, and (b) prior to any such Acquisition, Borrower delivers to Lender a pro forma "**Post-Acquisition**" calculation of the financial covenants, which pro-forma calculation shall establish to Lender's satisfaction that the Acquisition shall not cause the required financial covenants to be violated.

6.13 Change in Business. Engage in any business in which Borrower and any Guarantor is not currently engaged, except for complimentary lines of business approved in writing by Lender.

6.14 Cumberland Emerging Technologies, Inc. Extend a loan or downstream monies in excess of $100,000.00 in the aggregate to Cumberland Emerging Technologies, Inc. without the express prior written consent of Lender.

ARTICLE VII
EVENTS OF DEFAULT

7.1 Events of Default. Any of the following events shall be considered an Event of Default (and shall be considered a Default pending the passage of time, giving of notice or other condition specified below):

(a) Principal and Interest Payments. Borrower fails to pay any amount due hereunder, under the Note (including without limitation principal and interest payments) or any other Loan Document within ten (10) days of the applicable due date; provided, however, no grace period shall be permitted for the final payment of principal and interest due on any applicable maturity date; or

(b) Representations and Warranties. Any representation, warranty, statement (including financial statements), certification or data made or furnished by or on behalf of the Borrower or any Guarantor in connection with this Agreement or any other Loan Document is incorrect in any material respect as of the date as of which the facts therein set forth were stated or certified; or

(c) Obligations. The Borrower or any Guarantor fails to perform any of the promises, covenants or obligations contained in or required by this Agreement, the Note, or any other Loan Document within ten (10) days of Borrower's or Guarantor's, as applicable, receipt of written notice

of such failure; provided no notice and cure period shall be applicable to a violation of Section 5.3, Section 5.6, Section 5.9, and Article VI; or

(d) Involuntary Bankruptcy or Receivership Proceedings. Any of the following events or conditions occurs with respect to the Borrower or any Guarantor and is not dismissed within sixty (60) days: (i) a receiver, custodian, liquidator, or trustee of itself or of any of its respective Property is appointed by the order or decree of any court or agency or supervisory authority having jurisdiction; or (ii) any of its Property is sequestered by court order; or (iii) a petition is filed against it under any state or federal bankruptcy, reorganization, debt arrangement, insolvency, readjustment of debt, dissolution, liquidation or receivership law of any jurisdiction, whether now or hereafter in effect; or

(e) Voluntary Petitions. Borrower or any Guarantor files (or takes formal company action authorizing the filing of) a voluntary bankruptcy petition or other petition to seek relief under any provision of any bankruptcy, reorganization, debt arrangement, insolvency, readjustment of debt, dissolution or liquidation law of any jurisdiction or consents to the filing of any such petition against it under any such law; or

(f) Assignments for Benefit of Creditors, Etc. Borrower or any Guarantor makes an assignment for the benefit of its creditors, or admits in writing its inability to pay its debts generally as they become due, or consents to the appointment of a receiver, trustee, or liquidator of itself or of all or any part of its Property; or

(g) Cross-Default on Other Debt or Security. Subject to any applicable grace period or waiver prior to any due date, (i) Borrower or any Guarantor fails to make any payment due on any of its Debt, in excess of $250,000.00, and (ii) any trustee or any holder of such Debt accelerates all of such debt so as to become due prior to its stated maturity or its regularly scheduled dates of payment; or

(h) Undischarged Judgments. Any court or other governmental authority renders judgment against the Borrower or any Guarantor for the payment of money in excess of $250,000, payment of which is not fully covered by valid collectible insurance or for which execution is not stayed by bond or otherwise; or

(i) Default Under Loan Documents. A default shall occur under any other Loan Document; or

(j) Change in Control. A Change in Control of the Borrower or any Guarantor occurs; or

(k) Material Adverse Change. A reasonable determination by Lender that a Material Adverse Change in the business or financial condition of the Borrower or any Guarantor has occurred, or that a Material Adverse Change has occurred in the value of the Collateral, or that any other circumstance or event has created a Material Adverse Change; or

(l) Cessation of Business, Etc. The liquidation of the Borrower or any Guarantor, or the termination or suspension of business of the Borrower or any Guarantor; or

(m) Sale of Assets. The sale of all or substantially all of the assets of the Borrower or any Guarantor other than in the ordinary course of business; or

(n) Defaults to Lender. Borrower or any Guarantor defaults to Lender in the performance under any indebtedness or Debt owed to Lender; or

(o) Fraud. The Borrower or any Guarantor commits fraud.

7.2 Remedies. Upon the occurrence of an Event of Default, Lender may declare the entire principal amount of all Indebtedness then outstanding, including interest accrued thereon, to be immediately due and payable without presentment, demand, protest, notice of protest, or dishonor or other notice of default of any kind, all of which the Borrower hereby expressly waives, and, at Lender's sole discretion and option, all obligations of Lender under this Agreement shall immediately cease and terminate unless and until Lender shall reinstate such obligations in writing. Such acceleration and cessation of Lender's obligations shall occur automatically, without any declaration by Lender or any notice, upon the occurrence of an Event of Default under Section 7.1(d), (e) or (f). Upon the occurrence of any Event of Default, Lender may also exercise all rights against any of the Collateral described in the Security Documents or afforded a creditor under applicable law, and/or bring an action to protect or enforce its rights under the Loan Documents or seek to collect the Indebtedness by any lawful means. All remedies provided in this Agreement or in any other Loan Documents shall be cumulative, in addition to all other remedies available to Lender under the principles of law and equity or pursuant to any other body of law, statutory or otherwise, and the exercise or partial exercise of any such right or remedy shall not preclude the exercise of any other right or remedy.

7.3 Right of Set-off. Upon the occurrence and during the continuance of any Event of Default, Lender is authorized, at any time and from time to time, without notice to the Borrower (any such notice being expressly waived by the Borrower), to set-off and apply any and all deposits (general or special, time or demand, provisional or final) at any time held and other indebtedness at any time owing by Lender to or for the credit or the account of the Borrower against any and all of the Indebtedness, irrespective of whether or not Lender shall have accelerated the Indebtedness or made any demand under this Agreement or the Note and although such obligations may be unmatured.

7.4 Default. Upon the occurrence of a Default, the Lender, at its option and without liability to the Borrower or to any other Person, may cease funding Advances under the Note until such time as the Default is cured.

7.5 Liquidity Cure. For a fifteen (15) day period after the occurrence of an Event of Default under Section 6.7 hereof (such Event of Default being deemed to have occurred on the date on which the Compliance Certificate for such period is required to be delivered pursuant to Section 5.1(c) hereof), Borrower may cure such Event of Default by depositing and maintaining on account with Lender a cash amount equal to all outstanding Indebtedness hereunder. The Borrower may only exercise the liquidity cure described hereinthree times during any rolling three (3) year period and in not more than two consecutive quarters.

GENERAL PROVISIONS

7.6 Notices. All notices, requests, demands, directions and other communications (collectively "**Notices**") required under this Agreement shall be in writing and shall be sent by hand, by registered or certified mail return receipt requested or by overnight courier service maintaining records of receipt, in all cases with charges prepaid. Any such properly given notice shall be effective upon the earlier of receipt or (a) the date delivered by hand, or (b) the third Business Day after being mailed, or (c) the following Business Day if sent by overnight courier service. All notices shall be sent to the applicable party at its address (or facsimile number) set forth below or in accordance with the last written direction from such party to the other party hereto:

Borrower: Cumberland Pharmaceuticals Inc.
Attn: Chief Financial Officer
2525 West End Avenue
Suite 950
Nashville, TN 37203

Lender: Pinnacle Bank
150 3rd Avenue South, Suite 800
Nashville, TN 37201
Attn: Tim Bewley, Senior Vice President

7.7 Invalidity. If any one or more of the provisions contained in any Loan Document for any reason shall be held invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of any Loan Document.

7.8 Term of This Agreement. This Agreement shall be binding on the Borrower as long as any portion of the Indebtedness remains outstanding or Lender has any obligations to make Advances hereunder, except that each Borrower's representations, warranties, and indemnity agreements shall survive the payment in full of the Indebtedness and the termination of this Agreement.

7.9 Successors and Assigns. No Borrower shall assign its rights or delegate its duties under this Agreement or any other Loan Document. All covenants and agreements made by or on behalf of the Borrower in any Loan Document shall bind such Borrower's successors and assigns and shall inure to the benefit of Lender and its successors and permitted assigns.

7.10 Participation. Lender shall have the right to enter into one or more participation or syndication agreements with one or more participating lenders approved by Lender on such terms and conditions as Lender shall deem advisable.

7.11 Waivers. As provided in T.C.A. Section 47-50-112, no custom, conduct, action or course of dealing on the part of Lender, its officers, employees, consultants, or agents, nor any failure or delay by Lender with respect to exercising any right, power, or privilege of Lender under the Note, this Agreement, or any other Loan Document shall operate as a waiver thereof, except as otherwise provided in this Agreement. Lender may from time to time waive any requirement hereof, including any of the Conditions Precedent, but no waiver shall be effective unless in writing and signed by Lender. The execution by Lender of any waiver shall not obligate Lender to grant any further, similar, or other waivers.

7.12 Amendments. This Agreement may not be modified or amended except in writing signed by the Borrower and Lender.

7.13 Governing Law. This Agreement, the Note, and the other Loan Documents constitute a contract made under, and shall be construed in accordance with and governed by, the laws of the State of Tennessee.

7.14 No Fiduciary Relationship. Nothing contained herein or in any related document shall be deemed to create any partnership, joint venture or other fiduciary relationship between Lender and the Borrower for any purpose.

7.15 Nature of Commitment. Lender's obligation to make Advances shall be deemed to be pursuant to a contract to make a loan or to extend debt financing or financial accommodations to or for the

benefit of the Borrower within the meaning of Sections 365(c)(2) and 365(e)(2)(B) of the United States Bankruptcy Code, 11 U.S.C. § 101 et seq.

7.16 Governance; Exhibits. The terms of this Agreement shall govern if determined to be in conflict with the terms or provisions in any other Loan Document. The exhibits attached to this Agreement are incorporated in this Agreement and shall be considered a part of this Agreement except that in the event of any conflict between an exhibit and this Agreement or another Loan Document, the provisions of this Agreement or the Loan Document, as the case may be, shall prevail over the exhibit.

7.17 Time of Essence. Time is of the essence with regard to each and every provision of this Agreement.

7.18 Costs, Expenses, and Taxes. The Borrower agrees to pay on demand all out-of-pocket costs and expenses of Lender (including the reasonable fees and out-of-pocket expenses of Lender's attorneys, paralegals, accountants, auditors, and consultants) incurred by Lender in connection with the preparation, execution, delivery, administration, interpretation, amendment, waiver or enforcement of this Agreement or the other Loan Documents, or in the protection of Lender's rights under the Loan Documents (including any suit for declaratory judgment or interpretation of the provisions hereof and any bankruptcy, insolvency or condemnation proceedings involving the Borrower, its Property, and/or any Collateral); provided that with regard to litigation costs, the Lender shall be entitled to recover such costs only in the event that it is the prevailing party. Notwithstanding the foregoing, the Lender agrees to pay indebtedness taxes under Tennessee Code Annotated Section 67-4-409 due upon the recordation of its financing statements. Upon Lender's request, the Borrower shall promptly reimburse Lender for all amounts expended, advanced, or incurred by Lender in endeavoring to satisfy any obligation of any Borrower under this Agreement or any other Loan Documents, or to perfect a Lien in favor of Lender, or to protect the Properties or business of any Borrower or to collect the Indebtedness, or to enforce or protect the rights of Lender under this Agreement or any other Loan Document, including all court costs, attorney's and paralegal's fees, fees of auditors and accountants, and investigation expenses reasonably incurred by Lender in connection with any such matters, and all such amounts shall bear interest at the Default Rate until paid in full. All obligations under this Section shall be part of the Indebtedness and shall survive any termination of this Agreement.

7.19 Counterparts. This Agreement may be executed in any number of counterparts or counterpart signature pages (by facsimile transmission or otherwise), each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute but one and the same instrument.

7.20 Distribution of Information. The Borrower hereby authorizes Lender, as Lender may elect in its sole discretion, to discuss with and furnish to any affiliate of Lender, to any government or self-regulatory agency with jurisdiction over Lender, or to any participant or prospective participant, all financial statements, audit reports and other information pertaining to the Borrower whether such information was provided by the Borrower or prepared or obtained by Lender or third parties. Neither Lender nor any of its employees, officers, directors or agents make any representation or warranty regarding any audit reports or other analyses of the Borrower which Lender may elect to distribute, whether such information was provided by the Borrower or prepared or obtained by Lender or third parties, nor shall Lender or any of its employees, officers, directors or agents be liable to any Person receiving a copy of such reports or analyses for any inaccuracy or omission contained in such reports or analyses or relating thereto.

7.21 Jurisdiction; Venue; Service of Process. THE BORROWER HEREBY IRREVOCABLY CONSENTS TO THE JURISDICTION OF THE COURTS LOCATED IN DAVIDSON COUNTY, TENNESSEE, INCLUDING WITHOUT LIMITATION FEDERAL COURTS SITTING IN THE MIDDLE DISTRICT OF TENNESSEE AND THE CHANCERY COURT FOR DAVIDSON COUNTY, TENNESSEE, FOR ANY SUIT BROUGHT OR ACTION COMMENCED IN CONNECTION WITH THIS AGREEMENT, ANY OF THE INDEBTEDNESS OR OBLIGATIONS, ANY COLLATERAL, OR ANY

RELATIONSHIP BETWEEN LENDER AND THE BORROWER, AND AGREES NOT TO CONTEST OR CHALLENGE VENUE IN ANY SUCH COURTS.

7.22 Jury Waiver. THE BORROWER HEREBY KNOWINGLY, WILLINGLY AND IRREVOCABLY WAIVES ITS RIGHTS TO DEMAND A JURY TRIAL IN ANY ACTION OR PROCEEDING INVOLVING THIS AGREEMENT, ANY OF THE INDEBTEDNESS OR OBLIGATIONS, ANY COLLATERAL, OR ANY RELATIONSHIP BETWEEN LENDER AND THE BORROWER. THE BORROWER WARRANTS AND REPRESENTS THAT IT HAS REVIEWED THE FOREGOING WAIVERS WITH ITS LEGAL COUNSEL AND HAS KNOWINGLY AND VOLUNTARILY WAIVED ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL. IN THE EVENT OF LITIGATION, THIS SECTION MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

7.23 Waiver of Certain Damages. IN ANY ACTION TO ENFORCE THIS AGREEMENT, THE BORROWER HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY AND ALL RIGHTS UNDER THE LAWS OF ANY STATE TO CLAIM OR RECOVER ANY SPECIAL, EXEMPLARY, PUNITIVE, CONSEQUENTIAL OR OTHER DAMAGES OTHER THAN ACTUAL DIRECT DAMAGES.

7.24 Entire Agreement. This Agreement represents the entire agreement between the parties hereto except for such other agreements set forth in the Loan Documents, superseding any and all other agreements, promises or representations existing prior to or made simultaneously with this Agreement. Any oral statements regarding the subject matter of this Agreement are merged herein.

ARTICLE VIII
DEFINITIONS AND USAGE

8.1 Defined Terms. In addition to other words and terms defined in the preamble hereof or elsewhere in this Agreement, the following terms shall have the following meanings herein, unless the context expressly requires otherwise:

"**Acquisition**" means a stock purchase transaction and/or an asset purchase transaction of an entity engaged in the same or substantially the same business as the Borrower or which is engaged in a complimentary business to that of Borrower.

"**Advance**" means any advance or other extension of credit made by Lender to Borrower under the Note.

"**Affiliate**" means a Person that directly or indirectly through one or more intermediaries controls, or is controlled by, or is under common control with Borrower. The term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, firm or corporation whether through the ownership of voting securities, by contract or otherwise.

"**Bank Product Obligations**" means all obligations and other liabilities of Borrower to the Lender or any affiliate of Lender in respect of any of the following services provided to Borrower by such Lender or affiliate of Lender: (a) any treasury or other cash management services, including (1) deposit account, (2) automated clearing house (ACH) origination and other funds transfer, (3) depository (including cash vault and check deposit), (4) zero balance accounts and sweep, (5) return items processing, (6) controlled disbursement, (7) positive pay, (8) lockbox, (9) account reconciliation and information reporting, (10) payable outsourcing, (11) payroll processing, and (12) trade finance services; and (b) card services, including (1) credit card (including purchasing card and commercial card), (2) prepaid card, including payroll, stored value and gift cards, (3) merchant services processing, and (4) debt service card services.

"**Business Day**" means any day other than a Saturday, Sunday or day on which commercial banks are authorized to close under the laws of the State of Tennessee.

"**Change in Control**" means:

(a) any "**person**" or "**group**" (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act of 1934, but excluding any employee benefit plan of such Person or its Subsidiaries (excluding Cumberland Emerging Technologies Inc.), and any Person acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the "**beneficial owner**" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act of 1934, except that a person or group shall be deemed to have "**beneficial ownership**" of all securities that such Person or group has the right to acquire (such right, an "**option right**"), whether such right is exercisable immediately or only after the passage of time), directly or indirectly, of 50% or more of the stock of the Borrower entitled to vote for members of the board of directors or equivalent governing body of the Borrower on a fully diluted basis (and taking into account all such securities that such person or group has the right to acquire pursuant to any option right); or

(b) during any period of twenty-four (24) consecutive months, a majority of the members of the board of directors or other equivalent governing body of the Borrower cease to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body (excluding, in the case of both clause (ii) and clause (iii), any individual whose initial nomination for, or assumption of office as, a member of that board or equivalent governing body occurs as a result of an actual or threatened solicitation of proxies or consents for the election or removal of one or more directors by any person or group other than a solicitation for the election of one or more directors by or on behalf of the board of directors).

"**Closing Date**" means the date of this Agreement.

"**Code**" means the Internal Revenue Code of 1986, as amended from time to time.

"**Collateral**" means any and all collateral securing or intended to secure the Indebtedness, as described in Article II hereof.

"**Compliance Certificate**" means a certificate substantially in the form of Exhibit A hereto.

"**Conditions Precedent**" means those matters or events that by the terms of the Loan Documents must be completed or must occur or exist before Lender would become obligated to fund any Advance, including, without limitation, those matters described in Article IV hereof.

"**Debt**" means all of a Person's obligations, contingent or otherwise, that would be classified on its balance sheet as its liabilities in accordance with GAAP, including, in any event and without limitation, (a) liabilities secured by any mortgage, pledge or lien existing on Property owned by such Person, whether or not the liability secured thereby has assumed by such Person; (b) all indebtedness and other similar monetary obligations of such Person; (c) all guaranties, obligations in respect of letters of credit, endorsements (other than endorsements of negotiable instruments for purposes of collection in the ordinary course of business), obligations to purchase goods or services for the purpose of supplying funds for the purchase or payment of Debt of others and other contingent obligations in respect of, or to purchase, or otherwise acquire, or advance funds for the purchase of, Debt of others; (d) all obligations of such Person to indemnify another Person to the extent of the amount of indemnity, if any, that would be payable by such Person at the time of determination;

(e) the principal portion of all obligations of such Person under capital leases (specifically excluding obligations under operating leases), (f) all obligations of such Person to purchase or repurchase any accounts, instruments, chattel paper or general intangibles, and (g) all Rate Management Obligations (excluding Excluded Rate Management Obligations).

"**Default**" means the occurrence of any of the events specified in Section 7.1 hereof, even though any requirement for notice or lapse of time or other condition precedent has not been satisfied.

"**Default Rate**" means the rate otherwise applicable under the Note plus 400 basis points per annum.

"**EBITDA**" means Net Income Attributable to Borrowers Shareholders, plus to the extent deducted in determining Net Income Attributable to Borrowers Shareholders, and without duplication, the sum of (A) Interest Expense, (B) income tax expense, (C) depreciation expense, (D) amortization expense, and (E) Non-Cash Compensation Expense, determined at each fiscal quarter end on a rolling four (4) quarter basis.

"**Environmental Laws**" means all laws, rules, regulations, codes, ordinances, orders, decrees, judgments, injunctions, notices or binding agreements issued, promulgated or entered into by or with any governmental authority, relating in any way to the environment, preservation or reclamation of natural resources, or the management, release or threatened release of any hazardous material.

"**Equity Interests**" means shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity ownership interests in a Person, and any warrants, options or other rights entitling the holder thereof to purchase or acquire any of the foregoing.

"**ERISA**" means the Employee Retirement Income Security Act of 1974, as amended from time to time, including (unless the context otherwise requires) any rules or regulations promulgated thereunder.

"**Event of Default**" means the occurrence of any of the events specified in Section 7.1 hereof, provided that any requirement in Section 7.1 for notice or lapse of time or other condition precedent has been satisfied.

"**Excluded Rate Management Obligation**" means, with respect to any guarantor of a Rate Management Obligation, including the grant of a security interest to secure the guaranty of such Rate Management Obligation, any Rate Management Obligation if, and to the extent that, such Rate Management Obligation is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such guarantor's failure for any reason to constitute an "eligible contract participant" as defined in the Commodity Exchange Act and the regulations thereunder at the time the guaranty or grant of such security interest becomes effective with respect to such Rate Management Obligation. If a Rate Management Obligation arises under a master agreement governing more than one swap, such exclusion shall apply only to the portion of such Rate Management Obligation that is attributable to swaps for which such Rate Management Obligation or security interest is or becomes illegal.

"**Funded Debt**" means (1) all obligations for money borrowed, (2) all obligations evidenced by a bond, indenture, note, letter of credit or similar instrument, (3) all obligations under capital leases (excluding lease of office space), and (4) all other obligations upon which interest charges are customarily paid.

"**Funded Debt Ratio**" means the ratio of Funded Debt divided by EBITDA, as determined at the end of each fiscal quarter on a rolling four (4) quarter basis.

"**GAAP**" means generally accepted accounting principles as in effect from time to time.

"**Guarantors**" means each of Cumberland Pharma Sales Corp., and any permitted future Subsidiary of the Borrower and/or any Guarantor, but shall exclude Cumberland Emerging Technologies Inc.

"**Guaranty**" means a guaranty agreement executed by each Guarantor in form and substance acceptable to Lender whereby each Guarantor agrees, among other things, to guarantee repayment of the Indebtedness to Lender.

"**Indebtedness**" means any and all amounts and liabilities of any nature owing or to be owing by Borrower to Lender from time to time in respect of the Loan, whether now existing or hereafter incurred.

"**Interest Expense**" means interest expense (including without limitation the interest component of any payments in respect of capital leases capitalized or expensed during such period) determined for such fiscal quarter and the prior three fiscal quarters.

"**Lender's Office**" means the office of Lender located at the address set forth in Section 8.1 hereof, as modified from time to time.

"**LIBOR**" means the rate per annum for deposits in U.S. dollars for a one month period appearing on that page of the Bloomberg's Report which displays Intercontinental Exchange Benchmark Administration Ltd. (or any successor administrator) Interest Settlement Rates for deposits in U.S. dollars (or if page or service shall cease to be available, such other page on that service or such other service designated by the Intercontinental Exchange Benchmark Administration Ltd. (or any successor administrator) for the display of such Administration's Interest Settlement Rates for Dollar deposits) as of 11:00 a.m. (London, England time) on the first Business Day of each month during the term of the Note; provided that if such rate or service is not available to the Lender for any reason, LIBOR means the rate of interest determined by the Lender to be the average (rounded upward, if necessary, to the nearest 1/100th of 1%) of the rates per annum at which deposits in U.S. dollars are offered to the Lender the first Business Day of each month during the term of the Note by leading banks in the London interbank market as of 10:00 a.m. (Nashville, Tennessee time) for a one month period and in an amount comparable to the amount of the outstanding balance under the Note.

"**Lien**" means any interest in Property securing an obligation owed to, or a claim by, a Person other than the owner of the Property, whether such interest is based on the common law, statute, or contract, and including, without limitation, the lien or security interest arising from a mortgage, encumbrance, pledge, security agreement, conditional sale, trust receipt or a lease, consignment, or bailment for security purposes. The term "**Lien**" includes reservations, exceptions, encroachments, easements, rights-of-way, covenants, conditions, restrictions, leases, and other title exceptions and encumbrances affecting any Property. For the purposes of this Agreement, the Borrower shall be deemed to be the owner of any Property that it has acquired or holds subject to a conditional sale agreement, financing lease, or other arrangement pursuant to which title to the Property has been retained by or vested in some other Person for security purposes.

"**Loan**" means the revolving credit facility described in Section 1.1 hereof.

"**Loan Documents**" means, collectively, all of the agreements, documents, papers and certificates executed, furnished or delivered in connection with this Agreement (whether before, at, or after the Closing Date) or at any time evidencing or securing any of the Indebtedness, including, without limitation, this Agreement, the Note, the Security Documents, the Guaranties, any Rate Management Agreement, and all other documents, certificates, reports, and instruments that this Agreement requires or that were executed or delivered (or both) at Lender's request.

"**Material Adverse Effect**" or "**Material Adverse Change**" means, as applicable, a material adverse effect on, or material adverse change in, (a) the business, operations or financial condition of the Borrower

and/or the Guarantors, (b) the value of the Collateral, (c) the ability of the Borrower or any Guarantor to perform its Obligations, as applicable, under any of the Loan Documents, or (D) Lender's ability to enforce the rights and remedies granted under this Agreement or any of the other Loan Documents, in all cases whether attributable to a single circumstance or event or an aggregation of circumstances or events.

"**Maturity Date**" means July 28, 2020.

"**Net Income Attributable to Borrowers Shareholders**" means for any period, the net income (or loss) of a Person for such period determined in accordance with GAAP, but excluding therefrom (to the extent otherwise included therein) (i) any extraordinary gains or losses, (ii) any gains attributable to write-ups of assets, and (iii) any income (or loss) of any Person accrued prior to the date it becomes a subsidiary or is merged into or consolidated with such Person on the date that such Person's assets are acquired.

"**Non-Cash Compensation Expense**" means non-cash compensation applicable to employees and non-employees of Borrower, as reflected in a line item depicted on Borrower's financial statements and calculated in substantially the same manner as calculated historically, provided that, in no event shall the amount of Non-Cash Compensation Expense used in the calculation of EBITDA exceed in any period of determination an amount equal to $2,000,000.00.

"**Note**" means that certain Revolving Credit Note issued by Borrower to the order of Lender in the principal amount of up to $12,000,000.00 of even date herewith, as such may be amended and/or restated from time to time.

"**Notice of Revolving Borrowing**" means a notice provided by Borrower to Lender pursuant to Section 1.3 herein.

"**Obligations**" means all of the Indebtedness and all of Borrower's and Guarantors' undertakings in the Loan Documents including, but not limited to, all agreements, representations, warranties, and covenants, and specifically including any Rate Management Obligations (excluding any Excluded Rate Management Obligation) and Bank Product Obligations.

"**PBGC**" means the Pension Benefit Guaranty Corporation and any entity succeeding to any or all of its functions under ERISA.

"**Permitted Liens**" shall mean (a) liens for taxes incurred in the ordinary course of business not yet due and payable, (b) liens in favor of mechanics, workmen and materialmen and statutory construction or similar liens arising by operation of law or incurred in the ordinary course of business for sums not yet due or that are being contested in good faith or to which adequate reserves exist on the financial statements of the Debtor, and (c) rights reserved to or vested in any governmental or regulatory authority to control or regulate any real property or interests therein in any manner, and all laws, statutes, rules, regulations, ordinances and other pronouncements of any governmental or regulatory authority.

"**Person**" means any individual, corporation, partnership, joint venture, association, limited liability company, joint stock company, trust, unincorporated organization, government, or any agency or political subdivision thereof, or any other form of entity.

"**Plan**" means any employee benefit or other plan established or maintained, or to which contributions have been made, by Borrower and covered by Title IV of ERISA or to which Section 412 of the Code applies.

"**Property**" or "**Properties**" means any interest in any kind of property or asset, whether real, personal, or mixed, or tangible or intangible.

"**Rate Management Agreement**" means any agreement, device or arrangement providing for payments which are related to fluctuations of interest rates, exchange rates, forward rates, or equity prices, including, but not limited to, dollar-denominated or cross-currency interest rate exchange agreements, forward currency exchange agreements, interest rate cap or collar protection agreements, forward rate currency or interest rate options, puts and warrants, and any agreement pertaining to equity derivative transactions (e.g., equity or equity index swaps, options, caps, floors, collars and forwards), including without limitation any ISDA Master Agreement between Borrower and Lender or any affiliate of Lender, and any schedules, confirmations and documents and other confirming evidence between the parties confirming transactions thereunder, all whether now existing or hereafter arising, and in each case as amended, modified or supplemented from time to time, and shall include but not be limited to the Rate Management Agreement and all schedules, confirmations and documents confirming transactions thereunder.

"**Rate Management Obligations**" means any and all obligations of Borrower to Lender or any Affiliate of Lender, whether absolute, contingent or otherwise and howsoever and whensoever (whether now or hereafter) created, arising, or evidenced (including all renewals, extensions and modifications thereof and substitutions therefor), under or in connection with (i) any and all Rate Management Agreements, and (ii) any and all cancellations, buy-backs, reversals, terminations or assignments of any Rate Management Agreement. Rate Management Obligations shall specifically include any obligation that constitutes a "swap" within the meaning of section 1a(47) of the Commodity Exchange Act, as amended from time to time.

"**Security Agreements**" means each Security Agreement executed by the Borrower and the Guarantors in favor of Lender of even date herewith, as such may be amended and/or restated from time to time.

"**Security Documents**" means any and all instruments creating, evidencing or providing security at any time for the Obligations, including, without limitation, the Security Agreements, Stock Pledge Agreement, and all UCC financing statements filed in conjunction therewith.

"**Stock Pledge Agreement**" means that certain Stock Pledge Agreement entered into by the Borrower in favor of Lender of even date herewith, as such may be amended, together with all stock powers and Regulation U forms, as may be applicable.

"**Subsidiary**" means, at the time as of which any determination is being made, any corporation, partnership, or other entity of which more than fifty percent (50%) of the issued and outstanding voting securities is owned or controlled, directly or indirectly, by any Person.

"**UCC**" means the Uniform Commercial Code as adopted in the State of Tennessee.

8.2 Computations; Accounting Principles. Where the character or amount of any asset or liability or item of income or expense is required to be determined, or any consolidation or other accounting computation is required to be made for the purposes of this Agreement, such determination or calculation, to the extent applicable and except as otherwise specified in this Agreement, shall be made in accordance with GAAP consistent with those in effect at the Closing Date.

8.3 General Construction; Captions. All definitions and other terms used in this Agreement are equally applicable to the singular and plural forms thereof, and all references to any gender include all other genders. The captions in this Agreement are for convenience only, and in no way limit or amplify the provisions hereof.

8.4 UCC Terms. Terms used in this Agreement that are defined in the UCC shall have the same meanings herein, except as otherwise expressly provided or amplified (but not limited) herein.

8.5 References to Documents and Laws. All defined terms and references in this Agreement with respect to any agreements, notes, instruments, certificates or other documents shall be deemed to refer to such documents and to any amendments, modifications, renewals, extensions, replacements, restatements, substitutions and supplements of and to such documents. Unless otherwise provided, all references to statutes and related regulations shall include any amendments thereof and any successor statutes and regulations.

[signatures commence on next page]

ENTERED INTO as of the date first written above.

BORROWER:

CUMBERLAND PHARMACEUTICALS INC.

By: /s/ A.J. Kazimi
A.J. Kazimi,
Chairman and Chief Executive Officer

LENDER:

PINNACLE BANK

By: /s/ Tim Bewley
Tim Bewley,
Senior Vice President

STATE OF TENNESSEE)
COUNTY OF _____)

Before me, _____, the undersigned, a Notary Public in and for the County and State aforesaid, personally appeared A.J. Kazimi, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who, upon oath, acknowledged himself to be Chairman and CEO of Cumberland Pharmaceuticals, Inc., a Tennessee corporation, the within named bargainor, and that as such Chairman and CEO of the corporation, he, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as such Chairman and CEO for the corporation.

WITNESS my hand and seal at office in _____, Tennessee, this the _____ day of July, 2017.

_____
Notary Public
My Commission Expires:_____

[Signature Page to Loan Agreement]

SCHEDULE 3.18

**COLLATERAL LOCATIONS, LEASES,
AND STORAGE AGREEMENTS**

Cardinal Health SPS
501 Mason Road, Ste 200, LaVergne , TN 37086

EXHIBIT A
COMPLIANCE CERTIFICATE

QUARTERLY COMPLIANCE CERTIFICATE

Date: As of the Quarter End: _____

To: Pinnacle Bank ("Pinnacle")

This certificate, which is duly signed by a senior officer of the Borrower certifies that:

a) Borrower is/is not in full compliance with all loan agreements, promissory notes and other loan documents between Borrower and Pinnacle. If not in compliance, summarize below or on a separate attached page.

b) The attached covenant calculations are/are not accurate and are/are not calculated in accordance with the loan agreements. If the response is negative, the following financial covenant violation(s) exist(s). If not in compliance, summarize below or on a separate attached page.

Summarization of violations or other:

Cumberland Pharmaceuticals Inc.

By: _____

Title: _____

FORM OF COVENANT COMPLIANCE CERTIFICATE

FINANCIAL COVENANT
(Calculated in accordance with GAAP)

Calculation Date: _____

Funded Debt Ratio.

- Funded Debt *(Numerator)* $_____

Divided By

- EBITDA
- Net Income Attributable to Borrowers Shareholders $_____
- Plus: Interest Expense $_____
- Plus: Income Tax Expense• $_____
- Plus: Depreciation Expense $_____
- Plus: Amortization Expense $_____
- Plus: Non-Cash Compensation Expense $_____
- Equals: EBITDA (Denominator) $_____

Ratio of Numerator to Denominator (Funded Debt Ratio): _____

Calculation shall not exceed 2.50 to 1.00, all as calculated on a rolling four quarter basis

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE 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-Q 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.

November 8, 2017

By: */s/ A.J. Kazimi*

A.J. Kazimi
Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002

I, Michael Bonner, certify that:

1. I have reviewed this Form 10-Q 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.

November 8, 2017

By: */s/ Michael Bonner*
Michael Bonner
Chief Financial Officer

Exhibit 32.1

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

In connection with the Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017 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 Officer and Michael Bonner, Chief 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 Officer
November 8, 2017

/s/ Michael Bonner

Michael Bonner
Chief Financial Officer
November 8, 2017